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THE BEST MEANS OF COMBATING INFANT MORTALITY*

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NEW YORK

My principal duty and intense pleasure is to tender my thanks to the House of Delegates which selected me for the highest honor in the gift of the medical profession of America, and to my colleagues of all the fifty states who were good enough to approve of its choice. Nor am I under less obligation for their attendance on this occasion to such citizens, men and women, as by their presence here exhibit their interest in things medical and socio-political.

My everlasting gratitude is due for the mode in which this great honor was conferred on me. Being duly aware of the small measure of my merits, I was overjoyed to have reason to believe that I owed my election to my lack of efforts to secure it. My democratic training and the gentlemanly nature of thirty-five thousand members of the American Medical Association, like the principled citizens of all parties, resent electioneering importunities and abhor the humiliation and demoralization caused by gesticulating and shouting candidates for office and honor. I have the confidence that if there be in this or any other cultured assembly anybody looking for the highest office for the sake of power and preferment only, he will be deservedly disappointed. Whoever *sets out* to be the first, let him be the last. There is only one thing that is and must forever remain first—that is the medical profession of America, as represented in this American Medical Association, and its object, which in all its aims is only one and indivisible. That one and inseparable object is to promote the art and science of medicine, to unite into one compact organization the medical profession of the United States for the purpose of fostering the growth and the diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safeguarding the material interests of the medical profession, of elevating the standard of medical education, of securing the enactment and enforcement of just medical laws, of enlightening and directing public opinion in regard to the broad problems of hygiene, and of representing to the world the practical accomplishments of scientific medicine.

With all this, my professional friends are conversant. I want to impress it, however, on our guests, lay friends both present and absent, for I want them to understand from the very wording of the constitution of the American Medical Association that their interests and ours are closely related.

In order to be powerful and influential, you must not only be wise but numerous. In last year's official report you were told that it was not prudent to increase our number. In fact, you are 35,000, and the largest medical association of the world. But please remember that yours is also the largest country of the world. There are 100,000 medical men besides us, with the same rights to enter and the same duties to perform. We have been told that reasons of finance are among those which should restrict our number. I appeal to you and to those 100,000 outside. A big bank account appeals to our treasury, but glittering gold never saved a country nor a soul. If you have money, it is yours to spend as you have made it. See to it that your House of Delegates spends it in increasing, and consolidating, and strengthening your Association. Our colleagues in the vast country want to be invited; then they will come in. They must learn what we are, and where their interests are—and the interests of the public—from better sources than the hordes of irregular manufacturers and the "freedomers" whose bitter attacks convey what knowledge many millions are permitted to have of the American Medical Association. Let the people understand the meaning of the American Medical Association and its doctors through *our* doings, and not through the scurrilous lies of our and the people's enemies. My hope is for an annual increase of thousands of members. Multiply and be fertile. Stand still awhile, and you invite decline.

It is by vast numbers only that our profession will ever attain its legitimate influence in politics and in society, and such beneficent power as Socrates, Descartes, Kant and Gladstone claimed for it. The proclamation of a great principle may impress many philosophic minds, but its realization demands the labor of the enlightened democratic masses. That is why from this exalted position of mine I beg to contribute a share to the discussion of a subject which has enjoyed an important place in the best brains and the warmest hearts of our enlightened and philanthropic era. I allude to the great mortality of the infant, and the numerous efforts to combat it. You are acquainted with them all. Many fair results have been accomplished; to add to them, is my ambition. For infants must not be born merely to be sick, or to die.

The Committee for the Reduction of Infant Mortality of the New York Milk Committee has made an arrangement with the Russell Sage Foundation which will furnish a nurse who will look after a thousand pregnant women, with a view to enable them to bear infants with *improved resistance*. The mother will be provided for in case she is overworked. Which one of the poor is not overworked?

According to the Milk Committee, and other authorities, 17 per cent. of infant deaths are caused by con-

*President's address before the American Medical Association, at the Sixty-Third Annual Session, at Atlantic City, June, 1912.

genital troubles. One-third of all of them occur before the first month has passed. Two great remedies are recommended. One is that no midwife be allowed to handle any of these cases; the other is that after confinement rest be provided for the mothers, and that the children be referred to milk stations. There is no worthier organization than that committee. What it sets out to do, it performs. It cannot help being restricted to charity so long as one-half of us is condemned to ask and take it, and the other obliged to give and teach. The latter is probably the most valuable performance of the committee. As its activities, like those of its kind all over the country, are meant to be thoroughly altruistic, it is entitled both to praise and to criticism. I hope it will appreciate the former and make use of the latter.

Look at that program: first, no midwife for any of the thousand mothers. You ask, "but who?" Second, the Milk Station for the child because the charitable people want rest provided for the mothers, *at the expense of the baby*. If that be a good program for one thousand women and one thousand babies, if that be the best that can be invented or discovered for the one thousand lucky enough to fall into the hands of charity, what is to be done with, or for, or against those millions beyond the reach of the Sage Foundation? But you suggest, these one thousand mothers and babies are to serve as object-lessons only, to be imitated by the millions. The least, then, we must hope and work for, is that the millions of women to be confined and the millions of babies to be born now and in the future, should participate in the same benefaction which is promised a few. The universal object is to save and raise babies. My program is different, inasmuch as it suggests additions and changes.

If 17 per cent. of infant deaths are caused by congenital troubles, study these congenital troubles and obviate them. The baby's life and pathology begin nine months before its birth.

If one-third occur in the first month, study and combat that first month, and the indications arriving during and after labor.

Your dealings are not with children but with infants; not with infants only but with the new-born that is just terminating its embryonal and fetal evolution and expects to be treated like a new-born human animal and not like a calf.

No midwife is to handle the case; indeed no midwife *will* handle any of your cases, for you have none, with rare exceptions. It is proper attendance, however, which society owes to the woman and the newly-born, as a duty to them and to itself. They are valuable assets, both of them. Unless *that* be granted, no discussion is competent.

In one of the programs to relieve the coming child and the struggling mother, I read the demands of absolute rest for at least four weeks before and six to eight weeks after confinement; nursing and feeding, both gratuitous when required; and hospitals for the illegitimate and—when needed—the legitimate confinements.

By the Milk Committee, satisfactory *rest* is wanted for the mother. That means that she did not have it in time, before or after the baby came. If rest means a long rest in bed, and milk station and no breast-feeding, you deprive her of her most important woman's privilege and office in life after child-bearing, and of the facility of getting well radically and physiologically. For without nursing the breast is liable to become atrophic and the uterus subinvolved. And the infant? Well, the infant, to give "rest" to the mother, is deposited on the altar of a milk station.

I shall be as brief as possible, for I do not believe that the speaker should have all the fun at the expense of his audience. On the other hand, I want to say my own things in my own way—perhaps taught by Jonathan Swift, who preferred to express his opinions "for the amelioration of his hearers, more than for their entertainment."

What the *world* wants is healthy babies. What the *baby* wants is full health and weight; that means a competent mother, sufficiently fed to have a quiet night, free from excessive labor through the day, exempt from a local curable disease that may interfere with the development of the child within her or undermine her well-being, her nursing qualities, and future pelvic and general health. What the *mother* wants is what she has a right to expect, as a reward for the service she renders to mankind in the shape of a healthy child: a place as healthy as the best hospital without disrupting the family. Modern society is built up on the family, the crude teachings of anarchical and a few early socialistic doctrines notwithstanding. No woman will consent to being taken to a hospital unless desperate need compels her to go. To tell a woman she may die unless she go is a cruel sentence. Society is beginning to appreciate that it owes human beings a human dwelling-place, with air enough to breathe in. If you build houses unfit to breathe in, you steal air which is common property. What *society* wants is men and women citizens. But in order to be able to rely on their cooperative functions, it must see to it that in its book of ethics the term of charity is supplanted by responsibility. It is useless to call that socialism or communism. It is the substratum of every religion and every humanistic philosophy. I like to avoid the term socialism and its alleged dangers, but only by abolishing the social causes engendering them.

Poets have told mankind that once, in the best olden times, the world was a garden, and they want it to become so again; statesmen—not politicians—have exerted themselves to disseminate prosperity and affluence; great physicians have looked for means to ward off disease and prolong an enjoyable life; jurists have endeavored to make the globe habitable by locking up or killing criminals, or the hopeless and dangerous insane. They all deal with those who are alive and, justly or wrongly, in possession of the surface of the earth. We are expected to deal with the present only, and to fight the evils which seem to be uncontrollable now and in the near future. Is there no way to prevent those who are born into this world from becoming sickly both physically and mentally? It seems almost impossible as long as the riches provided by this world are accessible to a part of the living only. The resources for prevention or cure are inaccessible to many—sometimes even to a majority. That is why it has become an indispensable suggestion that only a certain number of babies should be born into the world. As long as not infrequently even the well-to-do limit the number of their offspring, the advice to the poor—or those to whom the raising of a large family is worse than merely difficult—to limit the number of children, even the healthy ones, is perhaps more than merely excusable.

I often learn that an American family has had ten children, but only three or four survived. Before the dead ones succumbed they were a source of expense,

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poverty and morbidity to the few survivors. For the interest of the latter and the health of the community at large, they had better not have been born.

Theoretically and practically the addition of unhealthy, sickly, sick and contagious children is a misfortune to the newcomer, to his parents, and to society. Therefore a clean bill of health should precede matrimony. The clergymen who refuse to marry couples without it are good citizens, and the health departments are bound to see to it that contagious diseases, mainly sexual diseases, should be reported, watched, and cured. Nor is this all: Hereditary influences propagate epilepsy, idiocy, cretinism. Such persons must not be permitted to propagate their ailments.

Now we build asylums for the diseased, neuropathics, and drunkards; nurseries and schools for epileptics, cretins, and idiots; sanatoriums for incipient tuberculosis, and refuges—still too few—for the dying consumptives, withal conscious of the fact that our only hope of finally exterminating tuberculosis lies in the perfect but comfortable isolation of hopelessly advanced cases. Surely we try to cure and to prevent. Do we not begin at the wrong end? Consumptives, and epileptics, and semi-idiots are permitted to propagate their own curse, both what is called legitimately and illegitimately. Human society should have pity on itself and its future. The propagation of its degenerate, and imbecile, and criminal should be prevented. We have no positive laws yet for the syphilitic and gonorrheic who ruin a woman's life, deteriorate her offspring—if she have any—and impair the human race. We have come to this: that half of us are obliged to watch and nurse, and support the other half, many of whom should never have been born. In morals and in money, the degenerate are an expensive detriment. The only protection for the nation, for mankind, is to assure a healthy, uncontaminated progeny. Strict laws are required to accomplish that; such laws as will be hated by the epileptic, the consumptive, the syphilitic, and the vicious. No law ever suited the degenerates against whom it was passed, and it is unfortunate that while disease and incompetency and vice are to a high degree hereditary and contagious, moral health and virtue are not so to the same degree. Now those for whom the responsibility of the state does not exist are exactly those who are most entitled to it—the newly born.

Altogether, babies have a strenuous time of it, not only after birth. Heredity, degeneracy or incompetency is often caused by social influences. Financial temptations or necessity make women select not the strong and healthy men, but the old and rich. Their children are having less and less vigorous offspring. Rich and profligate boys spend their sexual powers on prostitutes and save little for possible babies. The lack of children in American families is not always due to voluntary abstinence. Thus the future of the American population has to rely on the offspring of the immigrants, and the American type of the next century will not be much influenced by those whose ancestors came on the Mayflower. Modern industry reduces the vigor and vitality of men, and woman and child labor exhausts the mothers and fathers of the future and present generations. Millions of men are prevented from contracting a marriage by pecuniary want and the impossibility of satisfying their sexual hunger except with prostitutes. That is true not only with regard to factory hands, clerks, and employees generally, but to the picked men of the people. Army and navy, the millions of soldiers and marines of all the nations of the globe, whom we are told by our self-styled leaders to imitate, withdraw the vigorous men from natural modes of living and labor and propagation, and prevent them from marrying in time; and wars, the cynosures of our coarse politicians who take the place that should be filled by statesmen, kill and cripple and deteriorate the best muscle of the land and tempt them into perdition. Only the "weaklings" are left—and their offspring! It is sad to contemplate the short-sightedness of our loud-mouthed leaders and their heelers.

The history of the newly born is pictured on their bodies. Pinard weighed numerous new-born babies. Those born in poverty were 10 per cent. less in weight than the others. Many were premature, their mothers injured and sick afterward, and without milk. Of that class, from three to four times as many die when at home as when in a well-regulated and well-fed hospital. Their subinvolved uteri and parametritides are very common occurrences and are the sources of lifelong invalidism and treatment. Those few are fortunate who need not complain like the woman healed by Jesus, who had suffered all her life from her illness and from the physicians. Those are not so fortunate who are treated according to the last magazines' academic discussions demanding an early day for getting up. A woman of the million, permitted or ordered out of bed to work, is the pivot of her poor household or her small farm or shop, or the live part of her lifeless factory machine. She is not like one of your first class paying hospital appendicitis patients who may be ordered out of bed for a half hour or a few hours daily, and will not be harmed thereby. She will continue to convalesce when she returns home. But the woman of the middle class or the poor who is told or permitted to rise early from an appendical wound, a uterine wound, or after confinement will add to her endometritis, her phlegmon, and her adhesions. All that is why even apparently simple questions of medicine will never be answered without the consideration of social questions, and medicine must more and more become the guide in the solving of social problems.

A decided physical inferiority at birth is a common occurrence. Ballantyne experienced in the Fulham Infirmary as high a percentage as 21.9. They are called unfit, when born of overworked, underfed, and neglected women. Their number is much smaller and very trifling when their mothers, when poor, are looked after long before the uterine life is terminated or when circumstances, financial or sanitary, are more favorable.

Many premature, feeble, thin babies of unpromising weight may be saved when there is ample care, such as a midwife will more readily give than a doctor. If that be absent, the baby's life is endangered. Is salvation worth while? Who can tell, unless you try? Kant, Goethe, Helmholtz were puny waifs, whose lives were despaired of. But they have furnished elements of culture to the world of which we might have been deprived if they had been without the midwife's care and close attention. Licetus is said to have been 5½ inches long. He died when 80 years old. He wrote eighty books, not many of them poor. That is an achievement, though not always pardonable, or even laudable. There are more men 80 years old, but they are not all guilty of writing eighty books.

Hard labor up to confinement interferes with the life or the health of the fetus and the new-born. The least that can be done for the mother is a reduction of working hours during pregnancy, and protracted rest after confinement. The women's worst occupation is

that with metals, mainly lead. Their percentage of premature births and miscarriages was 53.6; while those with other work furnished another sufficiently formidable number, viz., 17.2. Lead, mercury, phosphorus, copper, iodin, anilin, and nicotin have been found in the amniotic liquor and in the fetal organism.[1] The indication is clear; less work, less hours, no directly unsanitary occupation, several months' absolute rest after confinement. The living result will be hardier and heavier, and more resistant babies.[2]

When the baby is born, it wants many things; among others air and food, mostly food. Maternal milk is the only safe nutriment for the little stranger. Its quality is not much influenced by emotions, cares, worries; occasionally, only, by medicines taken by the mother, or rarely by her average food. Its quality is only temporarily altered by menstruation, and never causes a change that justifies the interposition of artificial feeding. The daily quantity is rarely less than a quart. Maternal affection, the wish to nurse, the act of suckling increases the quantity. There is no such thing as absolute absence of milk secretion. Essential alterations in the articles consumed by the nursing woman are not demanded. As her appetite is mostly increased, she is entitled to so much more than her average consumption as is required by the one or two pounds needed by her baby. She may eat and drink what she digests and was used to; she may perform her duties, attend to her labors — even some factory work — and fill her time as her station in life suggests. There is no reason why she should not spend time in shopping, concerts, theaters, lectures and parties, except the dog parties reminding you of 1790 — even suffrage parades — provided she will not forget that she has a baby at home to welcome and feed. The checking of babies, with or without baby carriages, by department stores, is a convenient innovation, which improves the chances of babies, women and merchants alike. Elections are no longer so exciting, dangerous, or murderous as they were in our large cities as late as twenty or thirty years ago — so there is no objection to woman suffrage, whether it be considered a plaything, a civic duty, or a disease. Even so, there is no danger, for infectious diseases in the mother are no contra-indication to nursing, unless it be a small-pox case in an antivaccinationist; for not injurious bacteria but beneficent antibodies pass into the milk and improve the baby's power of resistance. All of these considerations prove the dangerous tendency of those of our colleagues who in their mistaken subserviency to the ignorant suggestions of fashionable and lazy ladyships fall in with their and the dairymen's teaching that cows are their proper God-sent substitutes. These accommodating friends of ours are, through short-sighted complacency, enemies of the race.

The mother's milk has certain protective properties not possessed by any artificial food or the milk of another animal. Experiments have proved that the latter may propagate the artificial immunity toward certain vegetable poisons—the ricin and abrin; and a wet-nurse may immunize her nursling by being herself immunized through diphtheria antitoxin. So the mother who ever was thoroughly infected with scarlatina or measles will, at least for the time she is nursing her baby, protect the latter against those infections.[3] The infected milk of an animal will not have that effect; immunity is secured only by the milk of the same—that is, the human animal — which proves that we are superior to our animal brethren and sisters; unfortunately, only so long as we are young. Many of us when we lose our infancy lose our superiority.

The attentive doctor and the diligent midwife know that our women, poor and rich, suffer from no organic mammary degeneration. Large and small breasts can be educated into competent milkers. They can be roused into action after days and weeks of comparative inactivity, and into renewed efficiency after a recess of one or more weeks. It is quite well known, what I alluded to, that the very suckling of the baby is the best educator of the breast. That is why for the hundreds of thousands of mothers, the doctor should be the oracle; the midwife of the people, with her future education and her diligence, the trainer. Both should remember, or rather, learn, that a better milk-supply is guaranteed by not improperly and untimely straining the breasts' function. You do not milk a cow every two hours. A healthy new-born baby should never have the breast more than once every three hours; after the third month, he must get along with five meals in twenty-four hours, and he will turn out a baby worth having.

Milk contains substances organic chemistry never discovered or measured. They are the *ferments* which circulate in the blood. Some aid in the digestion of albumin; others, of fat and starch. Besides, there are defenders in it of the circulating blood; the *alexins* (Hans Buchner) destroy bacteria; agglutinins immobilize bacteria by bunching them; antitoxins formed in the infected vigorous animal destroy the poisonous toxins of the bacteria. When they are not sufficient—for instance, in bad cases of diphtheria—we inject antitoxins formed in the blood-serum of another animal—for instance, of horses. Any mother that ever had a mild or bad case of diphtheria — or, for that matter, certain other infectious blood diseases—accumulates some antitoxins in her blood and tissues, and in her future milk, and thus protects both it and her nursling. It is possible that so long as the infant is at the breast it is for that very reason less liable to take diphtheria. The fact is that few babies of the first half year become diphtheritic. That is the period of nursing at its mother's breast — its mother's or another human female's, not, however, that of another animal. It is not chemistry alone, but also biology, which distinguishes the milk of their organic producers. Old Doctor Heim was told by a so-called "noble" mother: "I keep an ass for my baby. Ass's milk is as good for my baby as my own would be, is it not?" "Yes, yes," said the old man, "just as good for young asses."

In Berlin half of the babies were breast-fed in 1890; in 1900, only one-third of them. At the same time, another German town, Barmen, nursed four-fifths of its babies — during one year, 99 per cent. Of 575 starving and neglected women in a Berlin institution, 83.3 per cent. could nurse their infants; why? they were better fed than before, and gave up only when the Moloch of industry reclaimed them as victims. After these poor babies had enjoyed the privileges of some of the rich — viz., health and life — they were sacrificed again on the altar of anti-social circumstances. For during the first year of life, of 1,000 breast-fed babies seventy have died; of the artificially fed, 270 up to 430. They have been counted by the statisticians, by the parents and by the undertakers.

Wittingly or unwittingly, surely not meaning it as a grotesque joke, the Nestlé Food Company has a picture on the cover of their circular. It represents a woman

1. Bluhm: In Weyl's Manual of Hygiene, vol. viii.
2. Fürth, Henriette: Die Mutterschafts-Versicherung, 1911.
3. Fifty years ago I could refer only to anatomic reasons which secured the very young against diphtheria

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with immense wings—perhaps meaning an angel—flying off with two babies to unknown parts.

The mortality of babies below 1 year has been found — not estimated — to be, for the exclusively breast-fed, 6.98 per cent.; for those brought up on a mixture of breast-milk and artificial food, 9.87; for those fed artificially, 19.75. That means that somebody or something is to be held responsible for the deaths of thirteen babies who should live in good health and with good prospects. Babies turned over to milk stations, because their mothers are told to "rest" may easily belong to that class. It is true, not every baby can be nursed, but the exceptions are scarce. One was born of a mother who died of sepsis carried in part by a dirty midwife or by an infected or ignorant doctor. That is true, statistically, even now that other doctors boast of their asepsis. My own past life does not class me among those others. So I may plead guilty, and no one has a right to blame me for exaggerations. I am, or have been, in the same boat with some of you. Of the five hundred tracheotomies I performed before the Listerian era, of a thousand I assisted in, of thousands of scarlatina, measles, erysipelas during epidemics, and even hospital gangrene during war times—too many occurred while soap and water existed without being used at the proper time and in the proper places. We did not know better, but you do. Every case of death of sepsis in the mother should burn hell into the conscience of whoever permits it nowadays; every case of death from lack of breast-milk should cause a trial for homicide against a doctor or midwife, or mother. For the latter, it is true, there are, if not excuses, many explanations. Some mothers must get up after three days to do washing and scrubbing, and do it without a sufficient quantity of food — starving women make no milk—must make a scanty living in the factory, or in a small business; others go to afternoon teas and bridge parties, or have been taught by their fashionable doctors who agree with them in their suggestions that modern science has proved that a woman's udder may be replaced by a cow's bosom, that a milk laboratory's clerk will furnish printed schedules for the modification or alteration or substitution of food adapted for every month of an orderly Fifth Avenue infant.

But after all, truth will crop out. There is rarely a woman who cannot nurse her infant.

Ignorance can be learned from and taught by doctors, by midwives, by nurses, but ripe wisdom also. As half of our babies, in all countries, are born under the supervision of midwives, it is these who, when their education will no longer be so hopelessly neglected as in our country, in their more intimate contact with the people can exert the widest influence. They will best overcome the prejudice which derives from the well-clad people the notion that breast-feeding is no longer fashionable; they will prepare the nipples, teach cleanliness and antisepsis such as they have been taught in the schools of the — I hope — near future. Edith Peiper reports an increase within five years of from 55.7 to 72.5 per cent. of women who gave exclusively breast-milk to their babies in a public institution.

In a large midwifery school of Germany (Stuttgart), the percentage of women who nursed their babies increased from year to year under proper treatment and teaching. Of one hundred women, only 22 to 25 per cent. gave their babies breast-milk to the exclusion of other foods before 1884. Exclusive breast-milk feeding was furnished by 41.1 per cent. in 1884; 61.4 in 1887; 84.3 in 1888; 100, in 1902; 99.5 in 1903. All of these women were poor or in very moderate circumstances, but they were looked after and fed before confinement and after. It takes missionary work to accomplish results of that nature.

In our country, it is calves that are looked after by our government. The babies have no votes yet. They will wait.

I must give you a few more figures, though I may bore you. But I have more sympathy with the world's babies than even with you. I want every incredulous Thomas to leave this place convinced that every baby has not only the right to suck a mother, but also the facility.

Dietrichs reports the mortality statistics of 628 infants of the poorest married women of Cologne. Of 100 children born alive, three of those who were nursed for nine months or more, died before the end of their first year; of those nursed from three to nine months, twelve; less than three months, thirty-five; of those who were fed artificially, forty-seven. Forty-seven dead out of 100 born alive, in one year.

Perhaps a report by Prinzing is equally convincing in connection with the mortality of other than intestinal diseases. During the years 1895 and 1896, the mortality of Berlin babies under one year, when breast-fed, was 7.09; when fed artificially, 38.6. Of 1,000 babies, congenital debility killed 14 of the breast-fed; 43.6 of those raised artificially. Of 1,000 babies:

	Breast-Fed	Artificially-Fed *
Gastro-enteritis killed	12.2	171.0
Atrophy and marasmus	2.0	24.0
Convulsions	11.16	42.0
Bronchitis and pneumonia	5.6	39.6
Pertussis and diphtheria	8.3	19.3
Other diseases	17.2	46.4

* Alfred von Lindheim, salati juventutis, 1908.

The illegitimate infants fared much better than the legitimate ones. That sounds paradoxical, but the former, when controlled by the authorities, were obliged to nurse their babies; the latter were the babies of the mothers who returned to domestic and factory work, and were exposed to neglect and early and improper artificial feeding, mostly by strangers. Among living infants of the second year, the proportion is reversed, for obvious reasons. The lessons to be derived from these facts are intelligible. A social improvement of the mothers, but that only, will add to the chances of the infant population.

Bock found that of infants who died of intestinal diseases, 61.4 per cent. were fed on flours; 24.3 per cent. on cow's milk; 15.8 per cent. on a mixture of breast-milk and cow's milk, and 1.4 per cent. on breast-milk.

During the siege of Paris (1870-71) the women were compelled to nurse their own babes, on account of the absence of cow's milk. Infant mortality under a year fell from 33 to 7 per cent. During the cotton crisis of 1860 there was a famine. Men and women starved, and on account of no money for artificial food, the women nursed their babies. One-half of their mortality disappeared. In the poor forest districts of the Westerwald the bottle-fed babies had a mortality of 20 per cent.; the breast-fed babies, one of 8 per cent.

In the *Berliner klinische Wochenschrift* (No. 28, 1911), Professor Franz publishes the report of the gynecologic divisions of the Charité. One hundred per cent. of his puerperal women nursed their babies. Dr. Kahn accomplished mostly the same results.

It is true that private practice does not reach the same number. Among the well-to-do, with better surround-

ings, better food, more rest, but greater indolence, less sense of responsibility, more money to throw away and more accommodating doctors to amuse them, and with more money with which to buy inferior food, the percentage of nursing women is smaller. Their daughters will know better, provided the doctors — we and our successors — will teach them.

G. Dufort reports on conditions prevalent in four districts of Belgium. Women objected to nursing, with a mortality of from 153 to 252 per one thousand, in the first year. Then the government and a private organization took measures to improve the percentage of breast-feeding women. Not all governments mix up with such things. Some are not on the job, some are on the slump. This percentage increased in certain localities where it was lowest, within two years, from 4.3 per cent. to 17.02. That increase was due to the midwives who were taught by premiums, by the practitioners and by clergymen. You see doctors and priests are still good for something. In other districts the percentage of breast-feeding was 56.6 per cent. in 1907; in the first half of 1908, 57.1 per cent.; in the second half of 1909, it was 74.12 per cent. That means an increase obtained by the country midwives in two years of 17.6 per cent. More, there were midwives who could report 94.9 per cent. in the first half of 1908, and at the end of 1909, 100 per cent.

The same midwives made it their business to extend the duration of breast-feeding. In 1907, there were fifty-seven babies who did not receive the breast through their first half year exclusively; this number was reduced to forty-eight at the end of 1909. Of the infants who were kept at the breast exclusively through six months, 64.7 per cent. extended this time to nine months; 75.4 per cent. in 1909. The author again and again refers to the powerful influence the midwives — after having been instructed — exerted among the population — the women and the babies.[4]

In 1900, the German Empire lost 426,485 infants under a year old. That means 27.5 per cent. of those born alive. Of these, 61,340 are reported to have died of congenital debility. What is this debility? How did it occur? Something has caused it during embryonic and fetal life. A disease of the embryo or fetus. Infection through the placenta; starvation of the mother by poverty; overwork in a factory; poisoning by a chemical; prolonged labor; unattended labor; unskilled attendance, and some of the other causes I am going to mention.

Whatever among these influences can be avoided or cured saves infant life. It is our duty to look for the causes of debility and death in order to escape from them. We have spent more care on the health and efficiency of the cow and her milk than of the mother and her milk. No doubt the efforts to improve the chemistry and physics of cow's milk, and the beneficent activity of medical and lay milk commissions have borne fruit, and the safeguarding of milk by sterilization, pasteurization and modification has saved lives, but we must look for a higher percentage of salvation. That can be reached, for even the average mortality of a single, mostly poor, country—Norway—has reached as low a standard as 8 per cent. under one year. Wherever financial circumstances are more favorable that should not be the lowest percentage.

What, after all, is a midwife, whose presence at or attendance on a confinement case must be shunned? An editorial of the *Boston Medical and Surgical Journal*,[5] that cautious and elegant magazine, gives the following definition:

> **The midwife may be defined as a person attempting to practice obstetrics without complete or even adequate medical education. The tolerance of such persons is an anomaly in an enlightened civilization. The midwife is a relic of medievalism, unhappily extant in the Old World, but whose persistence in our own community should not be encouraged by any form of recognition.**

Meanwhile, Holland, Belgium, France, Italy, require a two years' course of schooling for their midwives; Norway, Sweden and Denmark, one year. Germany has had its midwifery schools for more than a century. Many countries subsidize their midwives, who live and practice in sparsely settled districts. Great Britain established in 1902 its Central Midwives Board, to supervise and control midwives for the specified purpose of preventing the death of women in childbirth, infant mortality, blindness, and physical degeneration.

There are in England and Wales 17,790 trained and untrained midwives—too many yet of the latter class. The British Empire's 108 midwifery schools—including four in the East Indies and one in Hong Kong—have not yet afforded sufficient facilities. But the *British Medical Journal* emphasizes the fact that even in the old type of midwives there is a great improvement in cleanliness and obedience to rules, one of which is the calling in of medical aid in cases with a purulent discharge.

And we? Fifty per cent. of all the births in the United States are attended by non-medical women—in New York, 42; Buffalo, 50; St. Louis, 75; Chicago, 86. The patients so attended are negroes, aliens, and natives born of aliens; that means one-half of our population; that means those who during the disappearance—voluntary, wanton or not—of the original stock and by additional immigration and multiplication will form what within two generations will be the type of the two hundred millions of Americans then living. And where are our midwives? Where are the 108 schools which little Great Britain deems—on account of their scant number—insufficient for her urgent needs? Where are the American safeguards of our fetuses and new-born? When our experienced and far-seeing president of Bellevue and Allied Hospitals established a small school of midwifery, he was applauded for his exceptional foresight and altruism. We think nowadays that the ocean is only a short bridge; but the experiences of Europe, established on a solid and constant foundation, do not travel on it. That is the way of indolence by which we negligently murder our forests, lay dry our river beds, cause our freshets, and kill or cripple our newly born. I wonder in which other country we could be expected to accept what I lately read, that people cannot receive obstetrical service under the midwife, "no matter how well trained for her vocation;"—I ask why not?—or agree with a well-meaning author who sympathetically cries out: "Professors are teaching midwives, so medical students are deprived of their professors' time;" or throw up our hands when Stokel tells us that it is "a curious fact that even among people of refinement the older and dirtier the midwife, the greater seemed the confidence placed in her ability and judgment." That is as sound, perhaps, as when the great English opsonin scientist publicly arraigns habitual

4. Dr. A. Balestre and Dr. M. d'Oelsnitz (Bericht, über den III Internationalen Congress für Säuglingsfürsorge Berlin, Sept. 11-15, 1911, p. 789) express their satisfaction with the results of the Infant Protective Society of Nice, which was founded twenty-five years previously, mainly for the encouragement of maternal breast-feeding.

5. Feb. 23, 1911.

6. Brit. Med. Jour., Dec. 17, 1910.

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bathing for its dangerous effect in admitting microbes through the clean skin—a desirable bedfellow he!—or when Knott[7] tells us that "Lady Lawson, who died at the age of 116, never practiced ablution of any kind, or hardly in any degree, because, as she alleged, those persons who washed themselves were always taking cold or laying the foundation of some dreadful disorder," or the occasional preference given to an old doctor not though but because he is habitually intoxicated. There is still another line of mistaken altruism: Fenwick fears lest a midwife, scantily trained, compete with a physician. I should say, if she succeeds, it serves him right unless he owns a superior training. A pretty good doctor will not do for you or your wives or cases, any more than a pretty good egg for your breakfast.

Is there anybody here who remembers that when fifty years ago the question of the licensing of midwives was brought up before the Medical Society of the County of New York, it was voted down with all con except one? Ask our New York doctors at present. We know better now, and feel better about it. For we feel like citizens at present. We have also been told that all countries have found "the practice of midwives unsatisfactory." The fact is, however, that the other countries pretend to know their own business, and constantly add to the facilities and education of midwives as we do those of doctors. Some assert also that the attendant on a midwifery case must either be a trained obstetrician or a subordinate "like our excellent trained obstetrical nurse." "The obstetricians are the final authority to set the standard. They alone can properly educate the medical profession, the legislators, and the public." Who educated *them*, if you please, if not the professional schools, and they themselves as best they could afterwards? The midwives are not even mentioned as worthy to be educated. Do our obstetricians demand all the obstetric practice? I am prepared to bid a hearty welcome to the evening-dress obstetrician—who charges $200 or $300 or $500 a job—to the confinement where the man earns ten or fifteen dollars a week, or the woman thirty-seven cents a dozen, and the children nothing.

In spite of English complaints concerning the insufficiency of midwifery attendance, the reports are very promising. In 1910 there were 321 midwives in Liverpool, 198 in Birmingham, 159 in Manchester. In Liverpool, the average number of cases per midwife was seventy—one had 500 cases. Of all the births attended to there were by midwives in Liverpool, 71.9 per cent.; in Birmingham, 63.2 per cent.; in Manchester, 57.2 per cent. Still-births attended by midwives were 391 in Liverpool, 212 in Birmingham, 279 in Manchester. Their honest discipline is exhibited in the following figures: Medical assistance was called by 1,015 midwives in Liverpool, by 674 in Birmingham, and 2,279 in Manchester. The indications for such calls, under the universal rules, are high temperatures, abortion, laceration, illness of the patient, imperfect removal of the placenta, paffiness, convulsions, large varicose veins, sores on genitalia, malposition, trauma, hemorrhage, venereal diseases.

This very day the system under which they work with us is an absolute lack of system, slovenly and shiftless—no instruction is offered, no examination demanded, no supervision enforced, and the babies swell the universal mortality.

What is it that a midwife should be taught? Common sense and the experience of other countries should tell us, for we have none—I mean experience. We are only told that she is dirty, ignorant, untrained, superstitious, septic, the cause of invalidism, degeneracy and blindness. That is a list of statements exhibiting more temper than knowledge. For, indeed, in thirty-three of the fifty states and territories there is no law restraining the practice of midwifery or what is so called. In three there is no restriction whatsoever. In thirteen there is no provision for training, but there are, curiously enough, laws requiring examination and licensure. What is it, after all, that every one of our states—indeed, after a while, the federal government—should demand on the part of a midwife who is to be the obstetric guide of fifty millions of Americans? In my opinion, she must have as moral a character as you expect in a male or female student of medicine or man generally—and, for that matter, of any American outside a penitentiary; a good common school education without Latin and Greek; a fair health so as to endure the hard work she means to undergo in future; a reputation for love of work and conscientiousness; and such knowledge of popular physiology and anatomy as the program of our future midwifery schools will designate. What they must surely teach, like the English schools, are four topics—the *care of expectant women, the conduct of normal labor, the care of babies immediately after birth, the simple principles in an urgent case of artificial feeding*—and the diagnosis of abnormalities, so as to advise the calling in of medical skill. As there are many, I shall spend a few minutes on the consideration of some of them.

The fact is, that of one hundred deaths under a year, 2.2 occur by injuries during birth, ten on the first day of life, twenty-five during the first two weeks, thirty-four during the first four weeks. Most of them should be saved through perfected knowledge and art, more skilful attendance than half our population enjoys, and greater acquaintance with the dangers of the newly born. You notice that a large number die from other than the usual causes, viz., indigestion.

A calamity never prevented by one of us, possibly by an attentive and painstaking nurse or midwife, is death by suffocation.

There were in England and Wales during ten years, 10,009 *overlain* infants; in 1900, 1,774. In Liverpool, out of 960 inquests, there were 143 on babies that had died of suffocation from the same causes, by accident or malice; in London in 1900, 615; in 1901, 511; in 1902, 588. In London, they had annually 8,000 official inquests, one out of fourteen of which were on overlain infants. A serious complication of labor is *asphyxia*. It may be caused by the mother or by the fetus. Disorders of placental circulation, mostly toward the end of labor, early loss of amniotic fluid, respiratory and cardiac disorders, disruption of the placenta, compression of the cord and cerebral pressure can mostly be prevented or moderated by appropriate aid. Asphyxiated babies may die, however, within an hour, or the first few days. Those who do not so die are apt to be worse off. They are very liable to become paralytic, idiotic or epileptic. Little shares that opinion, the contrary assertions of others notwithstanding, that a large percentage of cases of spastic encephalitis ("Little's disease") is produced by congenital asphyxia. Hundreds of times, both in obstetric and in pediatric practice, have I, when looking for etiologic factors, received the uniform answer that the baby did not cry for some time after birth, and that

7. Med. Rec., New York, Dec. 3, 1910.

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the attendant had to work over it minutes, or even hours. Asphyxia must not be tolerated. A few moments' delay adds to the danger which may be averted by knowledge and skill. Losing a baby is a loss and bereavement; crippling it for life is worse. Accidents of the kind can be avoided by much less than the profound knowledge of medical experts, few of whom will ever deign to attend a mere case of common confinement. . The statement on a certificate that the new-born is a still-birth means a statistical fact, not an explanation, still less an excuse.

Atelectasis is more apt to be relieved, and death from it more readily prevented, by a midwife than by one of us, no matter by what it is caused. Soft cartilages in the premature, feeble muscles, defective nerve centers and lungs, but mainly hepatization, early pleural effusion, struma and compression of the brain are the usual causes. Frequent changes of position, warm and cold baths, shaking, forced inspiration, occasional closure of mouth and nose—so as to fill the medulla oblongata with an extra momentary dose of irritating carbon dioxid—an interrupted momentary Faraday stimulation and all the procedures demanded in asphyxia are advisable in atelectasis. A midwife should and can master all or most of these measures, as well as a doctor. The former is more efficient because she mostly uses more diligence and will spend more time than most of us.

The observing obstetrician or pediatrist or midwife has an opportunity to notice all sorts of microbic infections, such as tetanus, hemorrhages and the intense forms of syphilis. Its worst form is the pemphigus of the soles of the feet, which must be recognized within a few days. The midwife is the readiest to make the diagnosis, and to recognize the necessity of treatment. That does not mean *her* treatment, just as little as she will undertake the treatment of melena, sclerema, jaundice, sepsis, dermatoses, erysipelas, traumata or umbilical defects or diseases.

Some of the septic diseases of the newly born for the cure of which the doctor is always too late, or incompetent, are those which go by the name of Buhl, of Winckel, etc. They develop before any symptom is perceptible. The poisons which cause them are probably multiple and connected with the rapid metabolism occuring during, and immediately after labor. Many cases look like acute atrophy of the liver, or pernicious vomiting; or the main symptom is fatty degeneration, or hemorrhage, or intense jaundice. Overdoses of chloroform in predisposed women have been accused. Intense asphyxia I have seen coupled with, or causing it. There are many such cases which can be prevented by appropriate and instant aid, such as I plead for. Many, I believe, will be cured by vaccine therapy, provided it can be employed in time. That is possible only when the indication for it is suggested, or only suspected by a person who is on the spot and better taught than a common neighbor or nurse.

The *mouth* of the newly born is exposed to injury resulting from the antediluvian tendency of not leaving well enough alone. The habit of washing and rubbing the oral cavity of the newly born, even by clean fingers and rags, hurts the very thin mucous membrane covering the posterior part of the alveoli, and the punctated epithelial accumulations on both sides of the raphe. Doctors and nurses and midwives who do not know how to omit interference are dangerous. For the forcible removal of the epithelium leads to invasion of cocci and bacilli, and the mycelium of *thrush*. The latter, though easily cured by a strong solution of borax in glycerin, need not occur in the baby's mouth, for its habitat in the vagina of the mother is quite accessible, both in a private home and in obstetrical wards and in foundling institutions. A consecutive invasion of the stomach and intestines, of blood-vessels and lymph ducts, even of the kidneys and nerve-centers, may easily be avoided by a person who has been taught to prevent and to cure.

Constipation of the newly born should be recognized by the midwife. What I described nearly half a century ago as *congenital constipation* is the result of an excessive length of the sigmoid flexure. When its continuance for one or two days suggests it, enemata should empty the bowels. Unless that be done, moderate and later on serious costiveness is an accompaniment of the dilatation of the descending colon, and auto-intoxication. "Hirschsprung's disease" is rarely a fully developed congenital dilatation. If a midwife be too alert she is capable of preventing an operative interference. I was one of the alert midwives. None of my cases ever terminated on an operative table.

Ophthalmia is the source, not only of blindness, but of death through general septicopyemia under the general symptoms of multiple abscesses and arthritis. A series of cases I, like others, have observed, of vulvovaginitis, endometritis and peritonitis. That endometritis is always of long duration, may for anatomic reasons relapse indefinitely for many months and years, and often gives rise to contagious dissemination in families, in hospital and asylum wards, by careless nurses and by gregarious bathing.

Uric acid infarction of the baby is a frequent occurrence of the second day until the end of the first week. It is rarely observed by the doctor (if any was employed) who sees the new mother perhaps once a day, if at all. Thus in this respect the well-to-do mother is worse off than the poor who is seen by a midwife whose visits are more frequent and more extended.

The tissues of the newly born contain more water than those of the adult; the difference amounts to 10 per cent. *Loss of water* is badly tolerated, while large quantities are eliminated at once through the lungs, kidneys and skin, and some through the intestines. Without a proper supply, the tissues deteriorate and the physiologic equilibrium is lost. That was always so—the newly born is conservative—and was considered normal. The baby had to be satisfied with reading in every text-book—even in the old ones from which some new ones are compiled—that he has to please the attending oracles by giving up 10 or 20 per cent. of his weight within a week or two. However, as the mother has but little milk during the first days, the least the baby should have a right to expect is water — at least teleology ordains it so — the more so as the first mammary secretion means colostrum, which contains three or four times as much protein as the milk of later weeks — that means 3 or 4 per cent. That is mainly so — even still more so — when the baby is premature and endowed with less vitality than when born at full term. Neither you nor I shall undertake to change that, but the danger connected with it requires correction, and if artificial feeding be resorted to at all the food should be amply diluted. There is another reason for so doing. Uric acid sediments and renal stones are comparatively frequent in small infants. They are caused by the uric acid infarctions which, as a speedy result of the rapidly changing metabolism, are found in the diapers on and after the second day of life. Besides

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forming gravel and calculi, they give rise to occasional attacks of colic, to small hemorrhages and frequent cases of nephritis, with, or mostly without, pyelitis. Neither I nor my pupils and friends have seen so many stones and inflammations since, for the last forty years, we made it our rule to feed the newly born on plenty of water. It is also demanded for the purpose of rendering the chemical and physical condition of cow's milk casein more digestible. As long as a human baby is not permitted to live on its mother, that fact is important to consider. Artificial feeding during the first days and weeks should furnish more than 75 or 85 per cent. of water, which is normal even for the adult. Altogether, our infants and children are not supplied with water in sufficient quantity at any time. In our era of equality for all sexes and colors, we should recognize the rights of all ages.

When you are hungry, you want to eat; when thirsty, you drink. The baby wants its equal rights. But no matter whether it is hungry or thirsty, it is condemned to receive the same food to quench both its hunger and its thirst. When it cries with hunger, it justly receives food from the bottle or breast; when it cries with thirst, it is given the same food from the same bottle—not mere water. I have often felt like presenting a bill to the legislature or to the professional philanthropist, enforcing, when father, mother and physician are thirsty, beefsteak and potatoes. I wonder how they would like that. A German pediatrist improves the method of giving water by giving the new-born tea and saccharin. What tea is, I do not know; what saccharin is, we do know. It is found to be a poison. That should, however, not have been the reason why our magnanimous Agriculture and Treasury Departments twice postponed the execution of the law which forbids its indiscriminate sale by the manufacturers of foods.

Midwives are more fortunate than we doctors. They need not know so much as a few taskmasters ask of them—for instance, two German professors, Salge and Siegert, who are so interested in the babies as to insist on midwives being examined on the intricate problems of metabolism. I fear, after having been a midwife sixty years ago and since, I could not pass to-day. Then, they need not know all the mixtures and mathematical formulas concocted by twenty of my pediatrist friends, each one of whom is sure that the other nineteen are quite wrong. Nor need they be acquainted with the fifty artificial foods which were recommended by the *Deutsche medizinische Wochenschrift* a short time ago, and again rejected—all of them—in the very same year.

The teaching of midwives is not so difficult as part of our profession imagines it to be. We are defective ourselves, for there is a fact which seems to be agreed on by our college teachers, viz., that our young doctors are incompetent to conduct a normal or abnormal labor. As that is so, we, the practitioners, should try to learn some lessons by theory but more by practice. Their incompetence is the result of the insufficiency of our medical school instruction, which is acknowledged to have been scanty in spite of our four years' medical courses. The schools furnish neither systematic obstetricians nor competent general practitioners. I shall not be hard on them, however, for I was a teacher myself. That is why the number of septic infections and of stillbirths is liable to be large in their practice. If that occur in the green tree—viz., among the men and women with medical diplomas—what can we expect from the untutored?

We speak against midwives and their detrimental doings, and their unreliability. Teach them their duties, which are not many; furnish beside instruction—which even for a hundred thousand physicians is scanty or none—so that they will learn the manual care of labor; let them be taught not to use medicines, not to operate, not to try even to remedy, as a rule, wrong fetal positions; teach them the use of soap and water, and antiseptics; enforce by law and custom the frequent change of their own clothing; forbid the simultaneous attendance on two or more cases; see that the midwife does not attend a labor case as long as in her farmily or immediate neighborhood there is a case of contagious disease, and she will cause or disseminate no puerperal sepsis. She must be examined and licensed and protected, like you and me.

Registration alone, however, will not do. Nor will our complaints do. Our responsibility does not cease when we decline it. Our duty does not end by sending and collecting a bill for an individual medical service. A death not prevented, a life not saved, is a blot on our escutcheon. The people want more. We are not yet—as the British government proposes—official state employees of the people. If there were not an excess of individualism among us, the attempt to force socialistic coercion on the profession of England would not have been made. Not yet.

Less than a year ago, the New York Academy of Medicine passed, among others, the following resolution:

Whereas, some of the results of obstetrical malpractice are unnecessary blindness, mental and physical degeneracy, and death of infants, and unnecessary suffering, invalidism, and death of mothers; and whereas both doctors and nurses in this country are given instruction in the treatment and care of child-bearing women and new-born infants, there is no existing provision for the adequate training of women who take into their keeping the lives and future well-being of this large number of both mothers and infants, be it resolved that the Section of Obstetrics and Gynecology of the New York Academy of Medicine recommends that measures be taken in this state to secure state legislation which shall provide for the training, registration, licensure, supervision, regulation, and control of women engaged in the practice of midwifery.

It is useless to attempt a comparison of a midwife with a medical man. They must be considered individually. The ignorant doctor in obstetric work is the inferior of a well-informed midwife, and *vice versa*. I remember only two cases of sudden death caused by atmospheric air entering a large uterine vein—in both instances resulting from the nozzle of a fountain syringe introduced into the uterus before the air had all been expelled. In both cases it was a medical colleague that did it. That does not prove that we doctors do not know how to clean a uterus without pumping air into a vein—but I know of no midwife that could have done worse. Still, ignorance, like sinfulness, makes all mankind kin. The greater number of annual labor cases in the United States—more than a million—are attended by midwives. As long as these cases are uncomplicated, the presence of a bright trained woman should be, and is, welcome. She must have learned to distinguish the position of the fetus, and know when to call a doctor; how to do, in his absence, a version in cases of emergency; how to attend the eyes; hemorrhages depending on incomplete uterine contraction or from injuries—one of which is tearing off of the placenta—and how to recognize eclampsia, inversion of the uterus, the presence of a mechanical obstacle like fibroma or a contracted pelvis.

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She must know how to deal with asphyxia. More than anything, she must have been taught to appreciate two things: first, how to keep absolutely clean—that means to disinfect herself and her hands; second—and therein lies a secret of success—not to leave the woman. That is more than you or I do, or usually did.

The results of midwife practice do not always compare unfavorably with those of our professional brethren: Of 116 cases of ophthalmia neonatorum which were treated in the Massachusetts Eye and Ear Infirmary in one year, 114 were in infants attended by physicians, and two by midwives. Of thirty-three cases treated in the New York Eye and Ear Infirmary in one winter, twenty-two occurred in the practice of physicians, and eleven in that of midwives. Of the eleven midwives, three had used nitrate of silver; of the twenty-two doctors, only one. According to these reports, if it were wise and proper to generalize, the doctors should be replaced by midwives.

In a period of years, 1905-10, the City of Manchester, England, has the following to say about puerperal fevers, and recoveries and deaths following them, in the practice of midwives and of doctors. In the practice of midwives there were 219 cases of puerperal fever, with forty-one deaths; in the practice of doctors, 275 with eighty deaths; in the cases attended by midwives *and* doctor, 100, with twenty-six deaths.

Nor are midwives' cases, those reported in 1910, inferior in results — forty-five puerperal fevers were treated at home, with a mortality of ten = 22.2 per cent.; in Monsell Hospital, sixty-six cases with sixteen deaths = 24.2 per cent.; in other institutions, twenty cases with five deaths = 25 per cent.

The absence of skilled assistance from a confinement is one of the causes, not only of death, but of what is still worse, of degeneracy of the new-born. How many, nobody can tell. But it is worth while to reduce the number of 60,000 weak-minded or mental degenerates with which we are credited in the state of New York alone. The statement on a birth certificate that the new-born is a still-birth means a fact, not an explanation, still less an excuse. Many of them could be avoided if the women of the United States were protected against ignorance and indolence. When I was in active obstetric practice fifty years ago, I met in the tenement-house population many a case, which should have been saved if any bystander had known enough to afford manual assistance, such as that of a well-informed midwife. That, however, is only a part of the possible mishaps. What proper assistance may prevent is a vast number of paralytic, spastic, idiotic, semi-idiotic or epileptic conditions, mostly during infancy and childhood. How many? I do not know. But I have seen hundreds personally. Questions were as follows: How was that baby born? Did it take long? How long? Was it an instrumental case? Did the baby cry immediately? Was anybody present to help you? Did it take the doctor, who was called in, long, a minute, ten minutes, or one-half of an hour to make the baby cry? The answer gives the history of asphyxia, which—and that is my point—could have been prevented, or relieved, at once by a midwife. I hope there are many general practitioners here, such as I am or have been. They know how much they would have wished to be present on the spot, or to have a midwife to attend when they did not care to attend or could not do so. How many cases might have been carried to a safe end, when a little aid would have prevented intracranial hemorrhage caused either by direct lesion or thrombosis, can be surmised only when you remember the many patients with meningeal hemorrhage or inflammation who die within a week.

Now, my friends, you have been kind to me and patient, as hundreds of times before. That is why I shall now finish in a minute with a few conclusions for those who with me are convinced that healthy women and living vigorous infants are the best possessions of this nation. They will not be conquered with treasures and cannon and corpses of countless men; they need conservation only. What I want is that a pregnant woman should be in a condition to carry her fetus to its legitimate end in health and vigor, and be able to nurse her infant. Every text-book talks to us of the inability of women to do so, and indicates formulas and tradeshops and factories from which to graduate toothless young Americans. One hundred per cent. of our women, however, can be made to nurse, even the "flower and fashion" of the land. From two to three times as many babies will live when breast-fed compared with the number of those whom they complacently try to raise on artificial foods. By breast-feeding you will save 100,000 babies that now die or become invalids, from no other cause but unnatural feeding.

Dangers which now attend the process of parturition for more than one-half of the women of this country must be modified, relieved or removed by the presence of a person instructed to conduct a normal labor and, when needed, to call timely aid. We want, for the benefit of the women who need midwives, 200 midwifery schools after English or German pattern. Let no legislature of any state pass without a bill or law to safeguard the newcomers and their mothers.

A town without an amply supply of good doctors and midwives and a village without one or two competent and responsible and licensed midwives, are like a tenement house without a fire-escape or a *Titanic* without life-boats.

19 East Forty-Seventh Street.

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NOTES ON THE TREATMENT OF ANKYLOSTOMA ANEMIA (UNCINARIASIS, HOOKWORM DISEASE) WITH THYMOL

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Some interesting articles recently published in THE JOURNAL[1] and the excellent publication of the members of the former Porto Rico Anemia Commission[2] have induced me, after a lapse of more than thirty years, to return to the argument of this remedy adopted by me, for the first time, in 1879, in the treatment of brickmaker's anemia, a disease which I ascertained to be due to ankylostomiasis, and which gave me the means of studying this form of anemia, described by me in all its details by the name of "ankylostoma anemia," in order to distinguish it from simple "ankylostomiasis."[3]

1. Schultz, W. H.: Remedies for Animal Parasites: A Study of the Relative Efficiency and Danger of Thymol as Compared with Certain Other Remedies for Hookworm Disease, THE JOURNAL A. M. A., Sept. 30, 1911, p. 1102. Endicott, E. E.: Hookworm Infection in the Deep Gold Mines of California, ibid, p. 1106.
2. Uncinariasis—Hookworm Disease—in Porto Rico, a Medical and Economic Problem, Washington, Government Printing Office.
3. Bozzolo: L'Anchilostomiasi e l'anemia che ne conseguita—Anchilostomoanemia, Gior. Internaz. del. Sc. Med., Naples, 1879.

This brief communication does not permit me to enter into details concerning my method of treatment and its wide diffusion, nor of its superiority over other methods in connection with the hookworm of America — *Necator americanus* Stiles — a parasite exceedingly obstinate of expulsion and much more so, as has been proved in Italy, especially by Monti and Siccardi, than the hookworm of Dubini.

These particulars, which are at the present day better known in America, perhaps, than in Europe will, for the greater part, be found by the reader in the interesting publication of the commission for the study of the Porto-Rican anemia. It is worthy of note that this commission effected no less than 4,474 cures of uncinariasis in Porto Rico with thymol, and that Dr. Baerman at the great International Exposition of Hygiene, held at Dresden in 1911, demonstrated how 47,000 patients were cured with this same remedy.

These and many other facts and publications clearly demonstrate the immeasurable advantages to humanity derived from the application of such a simple, easy treatment—a treatment which costs little, and is sure and harmless, conquering and exterminating a disease of almost world-wide diffusion, terrible in its effects which are such, as we learn from the celebrated explorer, H. H. Johnston, in the tropical and subtropical regions, for example, as to prevent their development, not only by the work of the white man, but also by the colored races.

Having employed this remedy continuously throughout the past thirty years, and not as a cure for ankylostoma only, I cannot but consider as somewhat exaggerated the fears expressed by the greater part of those who, while admitting the utility and great superiority of thymol in comparison with other drugs, regard its after-effects as likely to be poisonous, and see danger in the administration of the remedy in large doses or in the contemporaneous administration of some alcoholic beverage, and who advise the substitution of small and repeated doses for maximum ones. Indeed, in the several cases under my care during the time in which workers on the cutting of the St. Gothard tunnel, suffering from ankylostoma anemia, flocked to Turin, 12 gm. of thymol were given in twelve hours, 2 gm. every two hours, always well enveloped in capsules, and no serious disturbance was ever noted, either by me or my colleague, Dr. Medoni of Laveno—where a tunnel was then being cut—who increased the dose to 15 gm.

Graziadei, writing of his work in the clinic then under my direction, says:

> The tolerance of thyminic acid is so complete in certain cases as to render it possible to increase the dose, without danger, to 12 gm.; in fact, one patient who by mistake took 24 gm. of thymol during the night suffered no other more serious disturbance than moderate diarrhea with emission of hookworms. Another patient, 60 years of age, suffering from ankylostoma-anemia and heart disease with very irregular pulse, in one day took 14 gm. of thymol without wrapping it in capsules; nevertheless, save for burning sensations in the mouth and throat, he suffered no other serious after-effects, and the pulse remained almost in the same state as at first. And that thymol has no injurious action on the heart, nor on any of the bodily functions, was demonstrated in this clinic by Fiori, in a series of investigations made to determine the action of the drug on the circulation.

In one solitary case throughout my long experience, in a woman, it is possible that thymol, administered in large doses, proved fatal; as a matter of fact, at the post-mortem examination of this woman there were traces of marked enteritis, which had, perhaps, been the cause of death. This occurred many years ago and I cannot recall the details of the case. Possibly the fears expressed by those who adopted thymol among populations in which the disease is marked and extensive and attacks children, old men and women who have long been anemic, have their foundation in the unsatisfactory results obtained from the treatment in the case of a person too weak to support an energetic course of treatment for which their limited powers of resistance are inadequate.

These conditions are rarely seen in men of middle age with vigorous constitutions, such as are—for the most part—our sick workmen suffering from this type of helminthiasis.

Furthermore, before having met with ankylostoma anemia—that is before the year 1878—I had already used thymol in diabetes with satisfactory results on the glucose in the urine (glycosuria) and with no serious after-effects.[4] In these cases, however, the doses were restricted to 3 gm. daily.

Graziadei, in 1882, following my advice, resumed the treatment of ankylostoma anemia with doses of 2, 3 and 4 gm. of thymol per day continued over a length of time; and in spite of the small number of hookworms expelled, considerable improvement in health resulted. In view of the fact that so few worms were found in the stools and of the length of time necessary for the cure, he considered this method impracticable and that of maximum dosage far preferable.

The apparent contradiction between the small number of parasites found in the feces and the convalescence of the patient caused Graziadei to argue that the amelioration was due to the improved conditions of the stomach and intestines, favored by the antifermenting properties of thymol, which had already been adopted by Lewin and others against fermentation of the stomach with dilatation.

I now believe that an explanation of the fact is to be sought elsewhere and that it may be discovered, in the interesting observation made by the Porto Rico Anemia Commission, that certain persons who had been treated with the antihelminthic, even when examination of the feces showed it free from eggs, remained anemic if the antihelminthic treatment was discontinued, while the hemoglobin content increased rapidly when fresh doses of thymol were administered. To explain this fact it must be remembered that the absence of ova in the feces is due either to the inability of the female parasites still existent in the intestines, but affected by the poisonous action of the antihelminthic, to renew the eggs, or to the fact that all female worms have been expelled and a few male parasites only remain in the intestines, which theory would justify the opinion of those who state that the females are the first hookworms to be expelled immediately after the administration of the antihelminthic, these being most readily affected by the action of the poison. By the continuation, therefore, of the treatment, even in small and repeated doses, the few parasites which remain, male or female, are little by little killed. Even if the worms were not destroyed in a mass —as is the case when large quantities of thymol are given at one time (*therapia sterilisans magna*) so as to obtain the expulsion of several hundred ankylostomas in one or few excretions — they are affected little by little by the poison and gradually detach themselves from the mucosa and, dead, can even be digested by the intestines

4. Virtù nuove di un rimedio nuovo, Gaz. Osp., Milano, 1882, No. 2.

and pass slowly through them with their contents, since small and repeated doses of the antihelminthic are not followed each time by a purge to hasten the peristaltic motion of the intestines. It is therefore easy to understand why, in the case mentioned by Graziadei, few hookworms were found in the stools, and yet at the same time the patient's health improved, since the worms expelled were for the most part destroyed by the intestinal digestive operations and therefore traced with difficulty in the rough examination of the feces. This is also the reason why it seemed to me that my first experiments with thymol—in 1879—had failed.

Without, therefore, exaggerating the fear of the indirect drawbacks of thymol in the treatment of hookworm disease, which in Turin has been widely employed in other diseases as well, it may be advisable to administer it in smaller doses (*therapia sterilisans fractionata*) than those originally proposed by me in cases of weak persons who have been suffering for a long time, and when the treatment cannot be carried out under direct supervision.

In the case of persistent enteric catarrh it is further advisable, whenever possible, to precede the treatment with a dry diet, administration of tannic preparations, etc.

It now only remains for me to add a word in regard to the dangers of alcoholic beverages administered in connection with thymol. According to the original method suggested by me, after having ascertained the existence of eggs in the stools and when special circumstances—complications, etc.—did not stand in the way, 12 gm. of thymol were administered to adults, divided into two equal parts of 6 gm. each, well enveloped in capsules (to prevent insupportable burning sensations on the membranes of the mouth and throat) to be taken at two-hour intervals. After each pill a small glassful of strong wine or some alcoholic mixture was given in order to facilitate the solution of part of the drug. Now, with the exception, perhaps, of one or two, authors express their doubts as to the advisability of giving or permitting the patient to drink alcoholic mixtures, precisely with the object of preventing the solution of the drug, which solution renders a too abundant absorption possible, with danger of severe poisoning. There is no doubt that this is a reasonable precaution and worthy of attention, and I personally, in view of such considerations, for some time let myself be influenced by this opinion. While it is certain, however, that poisoning did not occur in any of the patients treated by me with my original method, no other phenomenon than giddiness, tipsiness and sleepiness presenting itself, although the urine was dark in color and gave the reaction of thymol treated with nitric acid and the reaction of phenol with ferric chlorid (in the case mentioned, of the woman who died, the alcoholic mixture had not been administered, it seemed to me that the action of the drug on the ankylostoma was less complete than in the past, so that the treatment had to be repeated oftener).

I do not insist on this point; I would merely remark that the ankylostomas occupy the duodenum, and it was in view of this consideration that I held the dissolving of part of the drug in the stomach to be advisable. As a matter of fact, the liquid part of the contents of the stomach, immediately passing the pylorus, comes into contact with the parasite more effectively than it would if entering the intestines in a solid form.

For this reason I consider the suggestion of Guiart, always to make use of thymol in a fine powder, worthy of attention, and better still the method adopted by the Porto Rico Anemia Commission, of thoroughly mixing the powdered thymol with powdered sugar. It is evident that prepared in this manner the small grains of powder can more easily come into contact with the worms, even if hidden and protected by the folds of the duodenal mucosa. I would also suggest the mixture of finely powdered thymol with creta preparata (precipitated carbonate of chalk), which preparation I adopt with satisfactory results in the administration of tannigen and tannalbin, the action of which without such precaution is less energetic, reaching the intestines in lumps and by this means rendering less equal and easy their contact with the whole surface of the mucosa which is therefore less influenced by the remedy. It will be understood from this that thymol reaching the duodenum, where the parasites are lodged, in a dissolved state penetrates all the twists and turns of the mucosa and works more surely on its dangerous visitors.

Further experience of this method of administration will prove whether or not, on account of the possible drawbacks of the absorption of a too abundant quantity of thymol, a less certain and prompt result of the treatment is to be preferred.

20 Via Magenta.

TREATMENT OF TETANUS WITH MAGNESIUM SULPHATE, WITH REPORT OF THREE CASES *

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In 1905, Meltzer and Auer proved by experimental work that paralysis of the whole body could be induced by magnesium salts. They showed that the conductivity of nerve-trunks could be interrupted by the local application of a solution of magnesium salts and that a more or less complete block for afferent and efferent impulses occurred. This work suggested the use of magnesium sulphate for tetanus.

As death in tetanus is due in at least half of the cases to asthenia produced by excessive muscular action and inability to take food, and in most of the remaining cases to asphyxia during a convulsion, the value of this experimental work by Meltzer as applied to tetanus can be readily seen. There have been reported in the literature twenty-four cases in which magnesium sulphate has been used by subarachnoid injection, and four in which it has been used subcutaneously. In the subarachnoid cases, thirteen patients recovered and eleven died. In the subcutaneous cases, all four patients recovered.

The first case I wish to report occurred in the practice of Dr. W. T. Trewyn, of Peoria, with whom I saw the patient.

CASE 1.—A boy, aged 11, run over by wagon, sustaining a lacerated wound of ankle. Incubation seven days. First symptom, trismus, opisthotonos and marked rigidity of all muscles. Spasms very frequent. Fifteen hundred units of antitoxin given. Patient removed to hospital. Eight drams of 25 per cent. magnesium sulphate solution given subcutaneously. Patient relaxed greatly in half an hour. Trismus and rigidity of back muscles persisted. Injections continued every two hours. Spasms gradually fewer in number and farther apart. Injections continued for one week, once a day, after spasms ceased. Recovery complete. No toxic effects from the magnesium.

CASE 2.—This case was referred to me by Dr. Fink of Green Valley. Baby girl, M. F., aged 20 months, breast-fed, with negative family history, had had no previous illness except acute intestinal indigestion during the first summer. There

* Read at the Thirty-Eighth Annual Meeting of the North Central Illinois Medical Association, at Dixon, Ill., Dec. 5 and 6, 1911

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was no history of injury. Five days before onset of symptoms, baby had urticaria and scratched herself often. It was summer time and she was playing in the yard and sitting on the ground. The first symptom noticed was stiffness of jaws and back, soon followed by spasms. Baby was brought to hospital some twenty-four hours after onset of symptoms. Examination showed a well-nourished child of good color. She was intensely rigid, the back muscles being mostly affected, so that opisthotonos was marked. The arms and legs were also affected and trismus well developed. The teeth could only be separated one-half centimeter. There was a risus sardonicus. Pupils were equal and reacted to light; reflexes greatly exaggerated. Careful scrutiny of all parts of the body showed no atrium of infection. The scalp, hands and feet, vulva, buccal and nasal cavities were inspected with special care. No urticarial lesions nor scratch-marks resulting therefrom were present. The mentality was perfectly clear. Pulse was 156; temperature 101.6, respiration 54.

During examination the baby had two severe spasms. She became cyanosed during these, pupils dilated and respiration practically ceased. The child had twelve spasms during the first twelve hours. In order to neutralize any toxin in the system not already combined with the motor ganglions, I gave 1,500 units of antitetanic serum and repeated it every four hours for three doses. This had absolutely no effect on the symptoms. At the end of twelve hours, the first magnesium sulphate injection was given. Four drams of a sterilized 25 per cent. solution of chemically pure magnesium sulphate were given into the abdominal wall. A few whiffs of chloroform were given, which, however, did not prevent a spasm. One-half hour afterward the arms and legs were completely relaxed and reflexes abolished. The opisthotonos had disappeared but the back muscles were rigid. The jaws could be opened so that nourishment was given. There was no effect on respiration or pulse, and no bronchorrhea. The patient was much more comfortable.

At the end of six hours the injection was repeated, the baby having had a spasm one hour previously. At this time spinal puncture was done and a clear fluid obtained. Stained specimens showed no bacteria. Cultures negative. The leukocyte-count was 15,000; 80 per cent. polymorphonuclear.

During the next seven days she was given from two to four injections a day, depending on the relaxation and recurrence of spasms. The injections were continued once a day for four days after the last spasm occurred. The pulse during the time varied from 130 to 168; respiration 36 to 56; temperature 101.4 to 104.8, rectal. Urine was voided and contained a small amount of albumin but no casts. Bowels moved every day, semi-solid; no mucus or curds. Liquid nourishment was taken rather freely during the relaxed periods. The patient improved rapidly after the spasms ceased. The back muscles were the last to lose their rigidity. After one injection she had a slight bronchorrhea which was controlled by atropin. I could notice no depressing effect on pulse or respiration. Chloral and sodium bromid were used per rectum to quiet restlessness and produce sleep.

CASE 3.—Referred to me by Dr. A. I. McClay, of Delavan. Female, aged 44. Crushing injury of toe due to horse stepping on foot in barn lot. Patient bare-footed at time. Wound dressed.

Ten days afterward stiffness of jaws, neck muscles, back and abdomen. Patient brought to hospital and examination showed trismus rather marked, but teeth could be opened one-half inch. Cervical, dorsal, lumbar and abdominal muscles rigid. Reflexes exaggerated. Three thousand units antitoxin given. Wound cleansed and opened up in usual manner. The next morning 10 drams of 25 per cent. magnesium sulphate solution given subcutaneously. Marked improvement. Same amount given next day and also the third day. Unnecessary to give more, as patient improved rapidly.

There are some dangers in the use of magnesium sulphate, as it has been shown that it often produces toxic effects, chief among which are depression of respiratory and cardiac centers. Bronchorrhea has also been mentioned, and occurred in one of my cases.

It has recently been proved, by Joseph and Meltzer of the Rockefeller Institute, that physostigmin antagonizes the toxic respiratory depression sometimes caused by magnesium. It does this by stimulating the respiratory center and the nerve-endings of the pneumogastric nerves within the lungs. It also antagonizes the depressing action of the magnesium ion on the nerve-endings of the respiratory *muscles*. It is well to bear this in mind when using magnesium, as it may be the means of saving life.

The dosage recommended for intraspinal injection is 1 c.c. of a 25 per cent. solution for every 20 pounds of body-weight. The dosage used in the above cases was much larger and no ill-effects were observed.

Two of these cases were acute and severe, not fulminant, but belonging to the class from which one would expect a high mortality. The prompt relaxation resulting after the injections certainly shows that magnesium is of value in the treatment of tetanus. It has no specific action, but by quieting the excessive muscular action it permits the patient to obtain more rest and to take food and thus tides him over while he is manufacturing his own antitoxin.

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A DIAGNOSTIC TENDER SPOT IN PULMONARY TUBERCULOSIS

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It is well known that one of the effects of pulmonary tuberculosis is the production of a degenerative change in the musculature of the body, and that this effect is especially marked in the muscles of the upper part of the thorax. This degeneration is comparatively plainly indicated on the affected side. The physical change is shown especially by atrophy of the scapular muscles. We also have marked hyperirritability, fibrillation being one of the proofs of this condition. I can add that in addition to these signs, we have what appears to be a hypersensitive or painful spot. Very likely this spot is a manifestation of the degenerative changes referred to. It may be due to a reflex from the pneumogastric nerve through the spinal accessory nerve supplying the trapezius, or the third and fourth cervical nerves supplying the levator anguli scapulæ, as all these nerves either have common origins, or are connected by anastomosis.

This spot is located immediately above the tip of the superior angle of the scapula at the insertion of the levator anguli scapulæ. The trapezius muscle also covers it.

It may be found by palpating the tip of the superior angle of the scapula with the finger and riding over it with more or less inward pressure. It is best to palpate both sides at the same time, exerting the same degree of pressure, but not enough to produce pain in a normal individual. The pain may be quite severe, causing the patient to object or wince, or it may differ only in degree from that on the opposite side. Ordinary myalgia and neuritis, as well as rheumatism, must be excluded.

By this method I have never failed to pick out the affected lung, or the more diseased lung if both are involved, and in bilateral cases have frequently been able to state the strong probability of both lungs being diseased. This method is original, and I believe it will prove to be a diagnostic aid.

Scientific Methods.—The student of medicine, and sometimes his teacher, often forget that the old methods of examining a patient, conducted by the more or less unaided senses, including that very necessary sense, common sense, are just as much scientific methods as examination by the most elaborate chemical or physical methods.—Ernest S. Reynolds, in *British Medical Journal*.

SOME RECENT CONTRIBUTIONS BY THE U. S. PUBLIC HEALTH AND MARINE-HOSPITAL SERVICE TO PREVENTIVE MEDICINE*

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The object of my paper is to set forth some of the recent contributions made by the U. S. Public Health Service to our knowledge of the cause and control of communicable diseases. The great Pasteur in a prophetic moment declared that "it is in the power of man to cause all parasitic diseases to disappear from the world." While his prophecy, in the glow of his epoch-making discoveries, may have seemed to him possible of early and perhaps easy fulfilment, we now know in the light of our greater knowledge of this class of diseases that the fulfilment still lies a long way into the future. Nevertheless, there have been made, in recent years, great advances in our knowledge of the cause, means of transmission and control of communicable diseases, and I shall set forth as briefly as possible in what manner the Public Health Service has helped in this advance.

Recent contributions by the Public Health Service to preventive medicine have been along two main lines: first, research work in the laboratories of the Service, and second, the application of new as well as older methods in the control of certain diseases. The two lines, however, at times necessarily merge.

MEASURES FOR THE CONTROL OF CHOLERA

In the application of preventive methods to the control of communicable diseases, the work done by the service during the past year to prevent the entrance of cholera into the United States stands out as one of the most important accomplishments of recent years. Cholera had existed in southern and western Russia for several years, but appeared in Italy only late in the summer and fall of 1910, and with the onset of winter the disease decreased markedly in that kingdom. In the spring of 1911, however, the infected area in Italy became wider and the number of cases greatly increased, so that it became necessary for the federal government to adopt unusual measures to prevent the entrance of cholera into the United States. The Secretary of the Treasury, on recommendation of the surgeon-general of the Public Health and Marine-Hospital Service, has authority, under existing laws, to require federal, state or municipal quarantines to enforce such special measures as in his opinion are necessary to prevent the introduction of epidemic diseases into the United States.

The measures instituted during the past summer for this purpose may be considered under three general heads:

1. *Quarantine Measures Enforced at Foreign Ports.*—These consisted in the enforcement, by officers of the service at foreign infected ports, of a detention of all steerage passengers for five days before embarkation from cholera-infected places and the observation of those detained during that time. The disinfection of baggage was required and the bringing of foodstuffs by immigrants was prohibited. The Italian government put into effect, for a time, in addition to the measures enforced by the United States officers, the examination of detained immigrants to detect cholera bacillus-carriers, and by this measure alone forty-one carriers were discovered and prevented from sailing from Italian ports.

2. *Quarantine Measures Enforced During the Voyage.*—These consisted in the enforcement of the measures provided for in the United States quarantine regulations in regard to ships from infected ports.

3. *Measures Enforced at Ports of Arrival in the United States.*—These included, in addition to those procedures already provided for in the quarantine regulations, the adoption and enforcement of certain special measures. July 19, 1911, the following amendment to the national quarantine regulations was issued by the Secretary of the Treasury on recommendation of the Surgeon-General of the Public Health and Marine-Hospital Service:

All steerage passengers arriving at ports in the United States from ports or places infected with cholera shall be subjected to bacteriologic examination and shall not be admitted to entry until it has been determined by said examination that they are not cholera bacillus-carriers.

Under authority of the United States quarantine laws officers were detailed as inspectors at the local quarantines at New York, Boston and Providence to see that this measure was immediately put into effect, these ports being the only ones having direct Italian immigration.

In addition, two officers from the Hygienic Laboratory especially trained in the bacteriologic diagnosis of cholera were sent to the New York quarantine to aid the local authorities in the large number of bacteriologic examinations made necessary by the adoption of the amendment to the regulations just referred to, and an officer was also on duty at Boston and Providence for the same purpose.

Another measure of importance was the adoption of the immigration destination-notification system. This measure provided that, when immigrants arrive at United States ports from cholera-infected places, the health officers at the places of destination should be sent notification cards informing them that immigrants from such-and-such places arriving on such-and-such ships are *en route* to their cities. In this way the local health officers may have oversight of immigrants from infected ports during, at least, the incubation period.

In cooperation with state and local health authorities, about 34,000 specimens of bowel discharges from passengers and crews from cholera-infected ports were examined bacteriologically to detect cases of cholera or cholera bacillus-carriers. As a result, at the New York quarantine, the cholera vibro was isolated from twenty-eight persons sick with the disease, and twenty-seven healthy persons were found to be discharging the cholera vibrio in their feces. These latter could not have been discovered except by the laboratory examination required by the amendment of July 19, 1911, to the quarantine regulations. Seven cases of cholera were detected at other places by the same methods. There can be no doubt but that the adoption of this measure alone by the federal health service saved the people of the United States from the loss of life and expense attendant on a serious epidemic of cholera. So far as known, the anti-cholera measures of the past summer were the most extensive ever undertaken, based on the scientific knowledge of the dissemination of the disease by carriers and on the principle that after a person liable to convey infection has been shown by laboratory examination to be free from infection there should be no bar to his entrance to the country. This great work was carried on quietly and without publicity, and to-day the country does not know of the danger that threatened it from cholera during the past summer, and from which it was saved by the Public Health Service.

* Read by invitation on Clinic Day at the annual meeting of the American Medical Association, Atlantic City, June 3, 1912.

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SUPPRESSION OF BUBONIC PLAGUE

The measures adopted by the service in the suppression of bubonic plague in San Francisco have conclusively shown that it is possible to eradicate this disease even when it has obtained a foothold in a large city. No plague, either in human beings or in rats, has been found in San Francisco since 1908. Work inaugurated under Dr. Blue to establish a plague-free zone to protect the bay cities has made such progress that the disease has been eradicated from four counties, the area of squirrel infection defined, the possible routes of infection to eastern states determined and guarded against, and a constant warfare against rodents continued.

In connection with the field work against plague, a large amount of research work on the disease has been made in the plague laboratories. During the past four years 1,171,721 rodents have been examined to detect plague infection. A plague-like disease of rodents easily confused with plague by persons inexperienced in the diagnosis of the latter disease has been found, its cause discovered and the susceptibility of certain of the lower animals to plague determined.

In these laboratories many important observations have been made on the diseases of rodents in their relation to man, and in them the first cases of rat leprosy in the United States were discovered and the rat-leprosy bacillus grown for the first time on artificial mediums.

WORK ON TYPHOID, PELLAGRA, ETC.

The work of the Public Health Service on typhoid within the last several years, including a prolonged and intensive study of the disease in the District of Columbia, investigations of numerous outbreaks in towns and cities, and studies of rural typhoid in different sections of the country, has contributed materially to the knowledge of the epidemiology of the disease. This work has been done at the request of state and local health authorities under the provision of law authorizing the investigation, by the Hygienic Laboratory, of matters pertaining to the public health, and under the quarantine law of 1893, to prevent the spread of contagious diseases from one state to another. While many of the requests received for assistance have been granted, it has not been possible on account of the lack of men and money to respond to all. The published reports of this work have been given extensive circulation and have served as a stimulus and a guide to local health authorities generally to conduct investigations of their typhoid problems.

In almost every locality where such studies have been made the measures recommended have resulted in a marked decrease of the prevalence of typhoid. The results have been most striking in the campaign against typhoid in North Yakima, Wash., inaugurated under the direction of an officer of the Public Health Service in the summer of 1911, where there was a reduction in the rate of prevalence of the disease of about 90 per cent. The work in Yakima county, described in Public Health Bulletin No. 51, marks a signal triumph of sanitation and may be expected to have a far-reaching effect.

Conditions like those which were responsible for the high typhoid-rate in North Yakima may be found, with variations, quite generally throughout the United States, and therefore, the simple and practicable sanitary measures recommended and carried out in North Yakima have a wide range of applicability. If similar successful measures were instituted throughout the United States in regard to this one disease, over 30,000 lives might be saved and over 350,000 cases of illness prevented.

The service has been making systematic studies of pellagra. These studies have consisted of epidemiologic investigations, which are believed to be the first made in this country, and the clinical and laboratory study of cases of the disease admitted to Service hospitals for study. Attempts have been made to produce the disease in monkeys and other animals by feeding experiments and by inoculation with blood and tissues from cases of the disease. An effort is also being made to collect accurate statistics of the prevalence, distribution and mortality of this disease, which has become one of the big public health problems of the country and which is not a reportable disease except in four states.

In cooperation with the Bureau of Mines the Public Health Service has been making a study of the sanitary condition of mines and of the cause and prevalence of certain diseases among miners. In connection with these investigations advantage has been taken of the opportunity to educate the mine-owners, the miners and their families in regard to health conservation.

Clinical and laboratory investigations of leprosy have been made in the leprosy research hospital maintained by the service for that purpose in Molokai. The work of Clegg in growing the leprosy bacillus has been confirmed, and Clegg himself is now one of the workers in the service laboratory.

During the past fiscal year service officers made physical examinations of 1,093,809 aliens to determine their freedom from communicable diseases and their physical and mental fitness for entrance into the United States and its dependencies. Out of a total of 27,412 aliens rejected, 344 were certified as suffering from idiocy, epilepsy or insanity. The medical examinations of arriving aliens made by officers of the Public Health Service constitute the second line of defense maintained at our borders by federal and local quarantine against communicable diseases, and are an important additional safeguard.

STUDIES OF MEASLES, TYPHUS, BRILL'S DISEASE, ETC.

A portion of the research work of the plague and leprosy laboratories has already been referred to, and it now remains to mention some recent studies made at the Hygienic Laboratory.

In the past year, studies were made on measles, as a result of which we have our first definite knowledge as to the susceptibility of the monkey to infection with measles. It was shown that the virus of the disease is present in the blood at least some hours before the eruption appears and for about thirty-six hours after. The behavior of the virus to various physical and other influences was tested. Experiments made to determine whether the scales were infectious justified the opinion that the desquamating epidermis in measles did not of itself carry the virus of the disease. It was conclusively demonstrated that the infective agent of measles was contained in the nasal and buccal secretions during at least the first forty-eight hours of the eruptive period; and in no instance were the secretions, collected at a later period, found to be infective.

Based on this work it probably will be possible for the quarantine in measles to be reduced from the usual period of twenty-one days to not more than fourteen days, and this one fact is of such evident practical importance that even lay members of health organizations can appreciate its value.

The importance of studies on measles is forcibly shown by the fact that, according to the census reports for 1910, measles stood next to diphtheria among the infec-

tious diseases as a cause of death among children. The studies on measles have already been reported in detail elsewhere, and it is therefore not necessary to refer to them further.

The study of typhus fever was begun by the laboratory two years ago in Mexico City but was interrupted before completion by the dangerous illness of Dr. Goldberger, who contracted the disease while engaged in the work. Before this occurred, however, it was shown for the first time that the lower monkeys were susceptible to the disease, that one attack of the disease in these animals conferred immunity to a subsequent attack and that the epidemiologic evidence pointed to the correctness of Nicolle's observation on the part played by the body louse in the transmission of the disease.

In connection with an investigation of the nature of an infectious disease of unknown origin, first reported and described by Dr. Nathan E. Brill, of New York, the studies on typhus were resumed in the fall of 1911. It was shown that, contrary to previous reports by others, monkeys were susceptible to infection by inoculation with blood from cases of the disease described by Brill and that one attack of the disease in the monkey conferred a definite immunity to subsequent infection with virus of the same strain. By a series of cross-immunity experiments it was found that monkeys recovered from infection with the New York disease, sometimes known as "Brill's disease," were immune to infection with Mexican typhus, and that monkeys which had recovered from Mexican typhus were immune to infection with the New York virus.

The conclusion was drawn from these cross-immunity tests that the disease described by Brill and others as existing in New York City was identical with the typhus fever of Mexico, and, inasmuch as the New York strain is undoubtedly of European origin, that the typhus of Mexico and the typhus of Europe are identical.

Further work on the disease has confirmed the work of others as to the rôle of the body louse in the transmission of typhus. In addition, it has been shown for the first time that the head louse can also transmit the disease. The studies on typhus are being continued and some of the results will be presented at this meeting.

As a result of this work, we now know that typhus of a mild type has been present in New York City for a number of years, and there is good reason to believe that the same is true of other large American cities. The recognition of these comparatively mild forms of typhus gives us for the first time a rational explanation of what Osler has characterized as a "remarkable feature" of typhus, namely, the occurrence of a few cases at long intervals of time from any other outbreaks, and any known foci of the disease. In other words, these mild forms constitute the missing epidemiologic link between so-called sporadic cases and outbreaks. This work, proving that typhus fever is present and has existed for years, unrecognized as such, in the United States, is one of the most important recent developments in preventive medicine. It opens up a fruitful field, the cultivation of which devolves primarily on the medical profession and local health authorities. The recognition and reporting of cases is an essential factor in the control of the disease, and great credit is due the physician who first recognized the disease and differentiated it from typhoid and continued to study and report it for thirteen years.

SUPERVISION OVER VIRUSES, SERUMS, ETC.

Under the authority of an act of Congress approved July 1, 1902, the supervision maintained by the Public Health Service over the propagation and interstate sale of viruses, serums, etc., has been continued and extended. No biologic product of this kind that is manufactured in one state may be sold in another except by firms licensed by the Secretary of the Treasury. Licensed establishments are inspected annually, and their products are examined in the Hygienic Laboratory from time to time for purity and potency. When the law was passed there were no official standards for any of these products, but as a result of research in the Hygienic Laboratory standards have been established for diphtheria and tetanus antitoxin. All vaccine is now required to be glycerinated, the sale of the old dry lymph-points prohibited, and each lot of virus tested to ensure its freedom from pathogenic organisms.

Systematic studies have been made and are being continued to determine the relation of vaccine virus to those unfortunate cases of tetanus that sometimes follow vaccination. Thousands of samples of vaccine have been examined for tetanus without, however, finding either the organism or its toxin. The work of the service in safeguarding the manufacture of biologic products has been a contribution of fundamental importance to the control of certain communicable diseases.

During the past eighteen months the subject of disinfectants has received much attention in the Hygienic Laboratory. There is probably no way in which greater fraud is practiced on public health authorities than in the exploiting and sale to them of so-called disinfectants by certain persons. Many of the claims made for their products by the manufacturers of some commercial disinfectants are almost wholly without justification and are of a most misleading nature; and the use of such preparations may explain in some instances the failure of terminal disinfection.

For these and other reasons, a great deal of study has been given to the question of the standardization of liquid disinfectants; and a method for their standardization has been devised. Using this method, fifty-four commercial disinfectants, purchased on the open market, have been examined in the laboratory and the results of the examination, together with the names and principal claims of each preparation, have been published. It was found that the claims made for many of the preparations were grossly exaggerated, while others have been found to have a higher efficiency in proportion to cost than many of the standard disinfectants.

As showing a beginning appreciation of the public health importance of such work it is not out of place to state that the Council on Pharmacy and Chemistry of the American Medical Association has appointed a committee to consider the question of standardization of disinfectants and has asked the cooperation of the Hygienic Laboratory.

OTHER CONTRIBUTIONS TO PREVENTIVE MEDICINE

Time will not permit me to refer in detail to other recent contributions of the Public Health Service to preventive medicine, such as the standardization of drugs, especially digitalis, ergot and thyroid preparations. As a result of the work done in the Hygienic Laboratory on drugs certain firms have been led to make important improvements in their products.

The study of embalming fluids and methods of preparing dead bodies for interstate shipment, begun at the request of the National Funeral Directors and Embalmers Association, has been of great value.

The disposal of sewage, with particular reference to rural communities, and the invention of a sanitary privy for such communities will undoubtedly have an impor-

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tant effect in reducing intestinal diseases in such localities.

Laboratory and field studies on hookworm disease and other intestinal infections have been made at the marine hospital at Wilmington, N. C., and other places, and these have resulted in bringing out facts of importance in regard to the prevention and treatment of these diseases.

Statistical studies of rabies have given the most definite knowledge as yet available concerning the prevalence of this disease in the United States. The preparation of a comprehensive bulletin on rabies has done much to stimulate interest in the subject and to direct intelligent suppressive measures. Cooperative work on rabies suppression, by preparing and distributing free of expense to state boards of health and others during the last four years antirabic virus for the treatment of over 3,000 persons, has been an important contribution to our efforts for the control of this frightful disease.

In Bulletin No. 41, the revised edition of which is known as Bulletin No. 56, has been published the most complete discussion that has ever been made on milk in its various phases as it relates to the public health. This publication has been accepted as of such an authoritative nature that it is frequently referred to as "the milk producers' manual."

Field and laboratory studies of poliomyelitis, cerebrospinal meningitis, spotted fever, the relation of interstate and international waters to the spread of typhoid fever, and a number of other important problems have received a great deal of attention and have an important public health bearing.

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THE ROLE OF INJURY IN THE PRODUCTION OF A CHICKEN SARCOMA BY A FILTERABLE AGENT *

PEYTON ROUS, M.D., JAMES B. MURPHY, M.D., AND W. H. TYTLER, M.D.

NEW YORK

The tumor produced by the injection of a Berkefeld filtrate of our transmissible chicken-sarcoma is first noticed as a minute nodule at some point in the track of the injecting needle;[1] and only a small proportion of the fowls injected develop the growth. On the other hand, when the causative agent has been introduced in the form of dried and powdered tumor-tissue, suspended in Ringer's solution, the sarcoma appears as a more or less diffuse mass at the site of injection; and it is found in many of the fowls. These facts have led us to suppose that the filterable causative agent requires for its action a cell-derangement or proliferation, such as the needle-prick or the presence of dried tissue induces. Experiment shows that this is indeed the case.

A number of susceptible fowls were injected, in one "breast" with a large quantity of active filtrate, in the other with an equal quantity of filtrate to which was added a little sterile, washed, diatomaceous earth. Podwyssozki[2] has shown that diatomaceous earth by its mechanical action produces in guinea-pigs a reactive proliferation of the connective-tissue elements; and our controls prove this to be true in chickens as well. The chickens injected with the Berkefeld filtrate were examined every week. Many of them developed a growth where both filtrate and diatomaceous earth had been injected, and in a lesser number a tumor also resulted from the filtrate alone. But in the one instance the tumor regularly arose as a diffuse mass, owing, as examination showed, to a simultaneous proliferation from many foci; whereas in the other it slowly appeared as a discrete, small nodule in the needle-track.

The effect of the filterable agent when injected into the blood-stream was now taken up. It was found that when a large quantity of an active Berkefeld filtrate, free of foreign particles, was injected into the circulation, a tumor seldom resulted (four cases among seventeen). The sarcoma arose more frequently when a little diatomaceous earth had been added to the filtrate, seven out of twenty fowls then developing a growth. Apart from these figures, the site of the tumors arising after the injection of filtrate free of foreign particles demonstrates the importance of cell-derangement. In three cases the growth had its primary seat in a functioning ovary, where injury and proliferation are of daily occurrence. In the fourth the growth was primary in the liver. Because of the general results, we feel that some focal derangement must have been present in this organ.

The factor of injury will not suffice of itself to explain the sarcoma's striking lack of infectivity under ordinary circumstances. During the past three years we have kept at one time or another in relatively close quarters, over 1,200 chickens, many of them with the sarcoma. To some the fresh, sarcomatous tissue has been fed, and many must have been contaminated with the dried tissue, in which, as we have found, the causative agent will remain active for over seven months. Trauma and other types of injury have been frequent among these chickens, yet not one has developed the sarcoma except when directly inoculated. Furthermore, judging from our recent examination of many "spontaneous" tumors the growth is not naturally endemic among fowls.

The nature of the other factors conditioning the tumor's origin has not yet been determined. It is evident that they are both local and general. Even with the agent in its present active form, and with the factor of injury supplied, many of the fowls injected with a large amount of filtrate fail to develop a growth. When the sarcoma follows an intravenous injection it is seldom primarily multiple, despite the numerous injuries everywhere caused by the infusorial earth. To reach the wing vein for injection we make an incision, thus producing an injury in which the tumor-producing agent might well be expected to localize; yet if the injecting needle is flushed with salt solution before being withdrawn, and the vein is tied off, the occurrence of a growth at this site is practically ruled out. Our experiments to determine the precise stage of tissue injury or proliferation which favors the occurrence of a tumor have not given clear-cut results.

The conditions determining the incidence of the chicken sarcoma have considerable interest in view of its close resemblance to some malignant mammalian tumors, not only as regards growth and general behavior, but also in its obvious lack of infectivity under ordinary circumstances. This last feature is accounted for in the case of the chicken tumor by the factors on which depends the action of the growth's filterable cause. That injury should be a determining factor is noteworthy in view of its importance as a contributory cause of mammalian sarcomas, including those of human beings.

* An article somewhat introductory to this one appeared in THE JOURNAL, June 1, 1912.

* From the Laboratories of the Rockefeller Institute for Medical Research.

1. Jour. Exper. Med., 1911, xiii, 397.
2. Podwyssozki, W.: Beitr. z. path. Anat., 1910, xlvii, 270.

INHALER FOR GAS-OXYGEN, GAS-OXYGEN-ETHER, GAS-ETHER, ETHER OR CHLOROFORM

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DESCRIPTION OF APPARATUS

The inhaler consists of two parts, a mixer and a combined face-piece and valve-holder.

The mixer consists of a box (6), of shape as shown in Figures 1 and 2, and on cross-section, square. This box has on it a drip-cup (2) with a controller (1), for either ether or chloroform. On one side of 6 and near top is a rheostat (26) for controlling current admitted to the heater inside (heater to be described later). On the lower part of 6 is a thermometer for showing exact degree of temperature within 6. At bottom of 6 is a drain-cock (7) for draining away excess of anesthetic.

In Figure 2, which is seen to be a section of 6 on a plane perpendicular to plane of bottom, 6 is seen to be divided into an upper and lower chamber (6′ and 6″) by an electric heater (21). In the upper chamber (6′) is seen the splash-plate (20) supported by 20′ and 20″. A flat view of splash-plate is seen in Figure 7. This splash-plate is below and directly in line with the drip-cup (2). The electric heater (21) is made of wire, porcelain-covered, as shown in Figure 8; it is connected to the rheostat (not shown in drawings) and the rheostat is connected with ordinary house current at binding posts *P* and *P* (Fig. 1). The controller (*C*) regulates the current flowing through the coil and in that way controls the heat generated. This heater is covered on top and bottom with fine-mesh copper wire gauze. In this upper chamber is the opening of the tube (4).

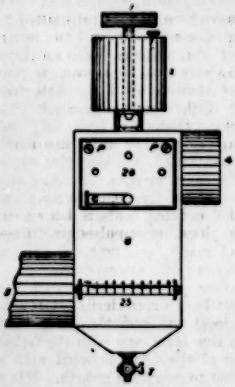

Fig. 1.—Side view of mixer, showing rheostat and thermometer.

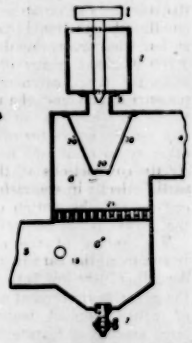

Fig. 2.—Section of mixer, plane perpendicular to plane of bottom.

In the lower chamber (6″) is seen the opening of the tube (5) and the cross-section of the thermometer (25), the bulb extending across the chamber in line with 5. At the bottom of this chamber is seen the drain-cock (7).

The valve-holder (10) (shown in Figures 3 to 6) is shown to be composed of an inner casing (10″) and an outer casing (10′). The inner casing which rotates within the outer casing (it being a ground joint between them) has three openings, one leading into the face-piece, one covered with Valve 16 and Opening 18. Valve 16 opens inward and is attached to and rotates with inner casing.

The outer casing (10′) has four openings, one each leading into Tubes 8, 9 and 12, and one leading into face-piece. Valve 17 guards the opening of 9 into the outer casing, is attached to outer casing and stationary, and opens outward into Tube (9). The rotation of the inner within the outer casing is controlled by Lever 11. In the Position B, the valves are in position as shown in Figures 4 and 5. In Position A, inner casing has been rotated one-quarter turn, bringing Opening 18 opposite Tube 12. In that position outer casing covers Valve 16, and inner casing covers Valve 17, neither valve then working. When lever is in Position R, the inner casing is still rotated one-quarter turn further, bringing Opening 18 opposite Tube 8, and the Valves 16 and 17 opposed to each other; in this case, also, neither valve works.

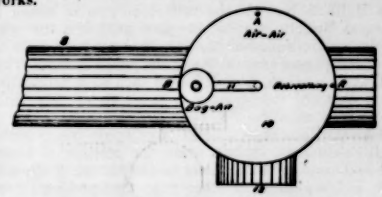

Fig. 3.—Top view of valve-holder.

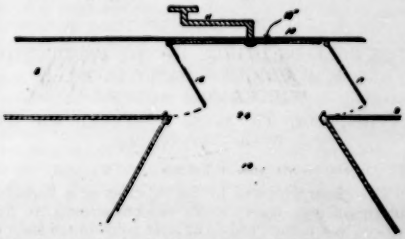

Fig. 4.—Section through valve-holder and face-piece, plane perpendicular to plane of bottom.

The face-piece (14) is joined to the valve-holder (10) by a joint that allows rotation of 14 on 10 or *vice versa*. At the bottom of 14 is the pneumatic cushion (15).

ADMINISTRATION

Gas-Oxygen.—The lever of the valve-holder is put on Mark A and the face-piece adjusted to patient's face; if the mask cannot be adjusted so as to be reasonably air-tight, a turn or two of a thin rubber bandage is taken over Point 15 and adjoining skin. A gas-bag of about 10 liters' capacity is attached to Tube 4 of mixer; this bag at end has a double cock, with tubes leading from each cock to compressed tanks of oxygen and gas. The controller (*C*) of the rheostat is placed so that temperature of inner chamber is about 100 F. A wire covered flexible rubber tube connects Tube 5 of mixer with Tube 8 of valve-holder and face-piece.

As it is now, the patient breathes air in and out through Tube 12 of valve-holder. The gas-bag is now filled with gas to which a little oxygen is added, and the lever (11) placed in Position B. With each inspiration

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the patient draws warmed gas from mixer and through Valve 16 of valve-holder; at each expiration Valve 16 closes and Valve 17 opens, breath being discharged in open air through Tube 9. The bag is allowed to be emptied in this manner, when all the air in lungs and passages will now be replaced with gas-oxygen; the bag is then refilled with the same mixture of gases, and the Lever 11 put in Position R; the patient now rebreathes in gas-bag, which is allowed to continue for four to five minutes, when Lever 11 is again placed on Position B and the bag allowed to be emptied. The bag is then refilled and rebreathing allowed for another five minutes, and so on.

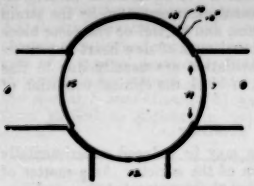

Fig. 5.—Section through valve-holder, plane parallel to bottom of holder.

If desired, ether may be allowed to drip from Drip-Cup 2 (hitting splash-plate, drop being finely subdivided), and the patient then rebreathes a mixture

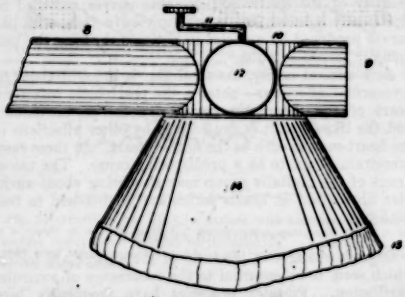

Fig. 6.—Side view of valve-holder and face-piece.

Fig. 7.—Top view of splash-plate.

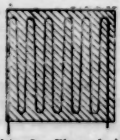

Fig. 8.—Plan of electric heater.

of gas-oxygen-ether, or the gas-bag may be removed and the patient receive ether and air. In the latter case the Lever 11 is placed in Position B. This will constitute the "open method" of giving ether.

Chloroform. — With the face-mask adjusted loosely to the patient's face, and the lever placed in Position B, chloroform may be allowed to drip from Drip-Cup 2. With each inspiration, patient receives a fresh amount of air and chloroform vapor, heated, and at expiration discharges same in air through Tube 9.

Throughout all these operations, by watching the thermometer on mixer, the temperature within the tube, and therefore what patient is breathing, can be regulated; the chilled gases are warmed and the liability of postanesthesia pneumonia be averted. It is not absolutely necessary to have the electric heater in the apparatus, the heater being omitted just leaving the two fine mesh wire gauzes; the apparatus in rebreathing will get warm, and in that way heat each new charge of gases, especially as the temperature of the body tends to rise.

AURICULAR FIBRILLATION

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In any disorder of the heart, the chief diagnostic and prognostic considerations as well as the more important therapeutic indications are based on the state of the myocardium. In many instances, the recognition of the pathologic process present is difficult, if not impossible, and the observer must be content with a tentative diagnosis based on a classification which is itself unsatisfactory and indefinite. The recently acquired exact knowledge in regard to the condition known as fibrillation of the auricle stands, however, in bright relief against this background of obscurity, and the general recognition by the profession of this affection is greatly to be desired.

In order that the nature of auricular fibrillation may be made clear, it may be well to give a brief summary of the facts generally accepted as to the mechanism of the normal heart-beat. This beat is believed to originate at a node near the junction of the superior vena cava with the auricle. From this point, contraction travels over the walls of the auricle, and an impulse is transmitted to the ventricle originating a contraction in the latter structure. The route of the impulse is through a bundle of junctional tissue which is known as the auriculoventricular bundle (bundle of His). Interference with the conductivity of the bundle may result in a prolongation of the interval between the contraction of the auricle and that of the ventricle, or in an occasional or constant inability of the impulse to reach the lower chamber. As a result of this latter condition, we may have contractions of the ventricle in response only to certain contractions of the auricle. This is known as partial block; in complete block, no impulses are transmitted, and the ventricle assumes a slower rate of its own which has no relation with that of the auricle.

Much of the present-day knowledge as to the sequence of events in the cardiac cycle has been derived through the use of the electrocardiograph and the polygraph. These instruments record graphically the movements of the auricles and of the ventricles. The appreciation of the character of the phenomena which we know to be due to auricular fibrillation has come through the use of these mechanical aids to diagnosis. Briefly stated, the electrocardiograph records on a continuous roll of sensitized photographic paper the movements induced in a string galvanometer by electric currents generated by the contraction of the chambers of the heart itself. Curves are produced which are the result of auricular and ventricular contractions respectively; these curves, moreover, can be readily differentiated by one skilled in their interpretation. In the use of the polygraph, simultaneous tracings are taken, usually from the external jugular vein, and from a selected artery, as for example, the radial. Resulting waves are registered by a moving needle or pen.

The venous record so obtained is an index to events occurring within the auricle; the arterial tracing gives information as to the character and rhythm of the coordinate contraction of the ventricle, and furnishes data for the identification of the various waves of the venous tracing. In the normal or so-called auricular type of venous pulse, there are typically three waves present. The first of these is due to the contraction of the auricle; it is, therefore, termed the *a* wave. The second wave is synchronous with the carotid pulsation

and is termed the *c* wave. The third is due to events occurring within the ventricle and is therefore known as the *v* wave. A full discussion of the manner in which information obtained through the study of electric and polygraphic curves was utilized in demonstrating the origin of the completely irregular pulse, the pulsus irregularis perpetuus of Hering, is given in the lecture by Thomas Lewis.[1] That author's investigations therein described mark an epoch in the progress of medicine, and through them we are now in full possession of the facts in regard to a manifestation which has been for a long time observed, but never hitherto understood. We now know that the "mitralized" pulse and the frequently attending phenomena of circulatory break-down are due to fibrillation of the auricle. This knowledge is regarded by Mackenzie as the most important gained thus far in regard to the functional pathology of the heart. Thereby, a hitherto unknown clinical entity is now made readily demonstrable, and its recognition enables us to venture a sane prognosis in a type of cases which has been hitherto most puzzling. Furthermore, we are equipped with data which, properly utilized, furnish indications for the institution of a plan of treatment which frequently results in a prompt and most striking improvement in the clinical condition—an improvement which may go so far as to restore a patient from an apparently hopeless state of decompensation to one in which he may resume his position as a useful member of society.

Fibrillation of the auricle is a condition in which the auricles no longer contract coordinately, but remain constantly in a position of diastole. Individual groups of fibers are, however, in ceaseless activity, and as a result frequent but disorderly impulses are transmitted to the ventricle. This chamber responds by contracting with an absolute disregard of rhythm, with no relation between the length or height of the resulting individual arterial pulse-waves. The appearance of the fibrillating auricle has been well described by Lewis,[1] as follows:

> When you compare the appearance of coordinately contracting and fibrillating auricles, you may draw parallels between this chamber and a surface of water disturbed on the one hand by great billows, and on the other by a downpour of rain. In the normally beating heart, the regular waves of contraction give rise to regular beats of the ventricle; in fibrillation, haphazard impulses issue from the auricular turmoil, and stimulate the ventricle. Thus the irregular beating of the ventricle is produced. But that is not the point to be emphasized . . . The point to lay stress on is that the visible signs in the heart are distinctly and easily recognizable.

The fact has been noted that the *a* wave in the venous tracing is due to auricular contraction. A definite curve *P* in the electrocardiogram is produced by the same phenomenon. That the presystolic murmur in mitral stenosis is produced at the mitral valve by a final impetus given to the entering blood by auricular systole is a fact which has been generally accepted by clinicians. Now, in auricular fibrillation, the auricle no longer contracts as a whole, but remains in a position of diastole. Therefore, the phenomena of *a* wave, *P* wave and presystolic murmur of mitral stenosis must be absent in auricular fibrillation, and their absence will, therefore, serve as an important point in the diagnosis of the affection. This diagnosis is rendered still more certain if there be present small oscillations on the venous tracing which occur during the period of ventricular diastole, or if like irregularities appear on the electrocardiogram. These little waves are produced directly by the fibrillating wall of the auricle, and are best shown when the rate of the heart is slow. They are known as *f* waves.

PATHOLOGIC PHYSIOLOGY

When the auricle is in a state of fibrillation the heart loses in efficiency, a condition due to the resultant rapid and disorderly contraction of the ventricle. The size of the heart is usually somewhat increased. Unless proper treatment is instituted, gradual exhaustion of the ventricle is the common result. A disturbance of conductivity, if previously present, is exaggerated by the strain on the conducting tissues, and partial or complete block may ensue. The occasional cases of slow heart in connection with auricular fibrillation are usually due to this cause. With the onset of block the clinical condition of the patient may improve.

ETIOLOGY

Auricular fibrillation may be induced experimentally by electrical stimulation of the auricle. As a matter of fact, the first recognition of the nature of the condition in man was made possible to Lewis by his noting the identity of the electrocardiographic curves recorded by electrically induced fibrillating auricles in dogs, with like curves produced by auricles in patients showing the perpetually irregular pulse.

As a clinical entity, the condition is brought about by myocardial affections—notably the postfebrile infectious heart of the rheumatic group, diphtheria, pneumonia and the like—but it is caused also by other affections of the heart-muscle such as the fibroid heart. In these cases overstrain is apt to be a predisposing cause. The use of drugs of the digitalis group may also bring about auricular fibrillation in hearts which are predisposed to that condition.

PATHOLOGIC ANATOMY

Organic changes in the body of the auricle are factors which seem to be essential to the occurrence of auricular fibrillation. Fibrotic processes have frequently been described, and these may be particularly dense in the region of the pace-maker, as in a case recently studied by G. Draper, of the Rockefeller Institute.[2] The pathologic histology of the condition requires further investigation.

FREQUENCY AND SYMPTOMS

We may accept Mackenzie's estimation that from 60 to 70 per cent. of all cases of heart failure are directly traceable to auricular fibrillation or are aggravated by it.

When compensation is maintained, there may be no subjective symptoms during a more or less prolonged period of time. The patient may go about his ordinary vocation with comfort, there being, perhaps, only an occasional annoying heart throb. As a rule, however, a limitation of the field of effort is early manifested. This condition may or may not have been preceded by attacks of tachycardia. The patient now becomes breathless on exertion, and gradually or suddenly, as the heart performs its work less adequately, all of the symptoms of decompensation are made manifest.

The signs and symptoms at this stage are those familiar to all whose practice brings them into contact with patients suffering with broken compensation. In marked instances there is orthopnea, cyanosis, dropsy, and such evidence of venous engorgement as attacks of breathlessness, hemoptysis, pain in right hypochondrium

1. Lewis, Thomas A.: The Evidences of Auricular Fibrillation Historically Considered, Brit. Med. Jour., Jan. 13, 1912.

2. Draper, George: Pulsus Irregularis Perpetuus with Fibrosis of the Sinus Node, Heart, iii, No. 1.

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and albuminuria. The pulse is usually rapid, there is utter disorder of rhythm, and the beats are of constantly varying force. Direct examination of the heart at this stage develops the ordinary evidence of hypertrophy and dilatation. The apex is displaced downward and to the left, and the area of dulness is increased. The impulses follow one another in a disorderly manner. The presystolic murmur of mitral stenosis is never present (Mackenzie). If a polygraphic examination is made, the venous pulse is shown to be of the ventricular type, and small *f* waves due to the fibrillating auricle may appear on the tracing, providing the pulse-rate be not too rapid. An electrocardiogram would show (Lewis): (1) the absence of a normal auricular contraction; (2) the presence of a type of ventricular beat which would indicate its origin in an impulse received from the auricle; (3) the special *f* oscillations; (4) constancy of the picture from patient to patient, in respect to the first three points.[1]

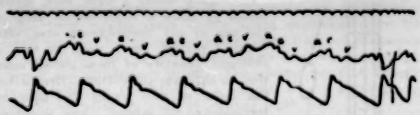


Fig. 1.—Polygraphic tracing showing normal or auricular type of venous pulse. A regular succession of *a* waves appear in the jugular (upper) tracing. Radial pulse shows no abnormality as to rhythm.

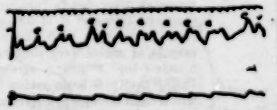


Fig. 2.—Tracing from R. H., a patient with auricular fibrillation as a result of fibroid heart. *A* waves are absent, and there is an irregular radial pulse. Partial decompensation. At times the heart would pass into temporary block, with resulting syncopal attacks and convulsive seizures.

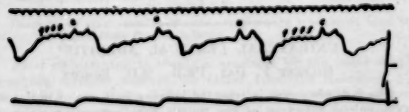


Fig. 3.—Tracing from same patient after onset of permanent block. The *a* waves are still absent, the rate has dropped to 28 and *f* waves have appeared in the jugular. The ventricle has now assumed a regular rhythm of its own. With the onset of the new rate, compensation was regained and the patient resumed his occupation without further subjective evidence of disturbed circulation.

PROGNOSIS

The affection may be transient or permanent. One attack predisposes to another. If transient, recovery may depend on the removal of the exciting cause, as was illustrated in a case observed by me in which auricular fibrillation developed during a streptococcus infection. If permanent, the prognosis depends on the rate of the pulse and the response of the heart to medication and to effort. The condition is not necessarily incompatible with long life.

Where decompensation is marked, proper medication and rest may still restore the patient to an ability to carry on life on a somewhat lower plane than formerly. In cases with a slow pulse, the outlook is more favorable than in those with a rapid pulse, and the prognostic value of treatment depends in great measure on its ability to lower the rate.

The personality of the attending physician is a marked factor in the prognosis, as success in treatment may depend on his ability to enforce on the patient that mode of life which enables the latter to live within his reserve force. There are cases, however, in which treatment fails to control the condition, and the patient dies as the result of more or less gradual failure of the circulation and general exhaustion. In yet other instances sudden death may occur.

TREATMENT

There is one sovereign remedy for the disease, and that is digitalis. This drug acts mainly by lessening conductivity, thereby culling out certain impulses which would otherwise stimulate the ventricle to ineffectual contraction. As a result, the rate is diminished, the ventricle gains in tone and the circulation may again become adequate. The resulting improvement in the patient's condition may appear miraculous. In these rare instances of auricular fibrillation in which the pulse is regular, digitalis usually fails. It is contraindicated in the cases accompanied by partial block. I have had my best results in the treatment of the condition by somewhat closely following the method of administration of digitalis as evolved by Mackenzie.

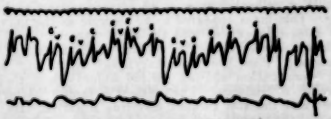


Fig. 4.—Polygraphic tracing from Mrs. H., aged 70, with a history of repeated attacks of rheumatism. Pulsus irregularis perpetuus. Ventricular form of venous pulse.

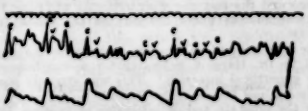


Fig. 5.—Polygraphic tracing from Mrs. T. G., aged 37, after the administration of digitalis. The patient was admitted to St. Francis Hospital with mitral stenosis and insufficiency, as evidenced by a loud presystolic murmur accompanied by thrill, an apical systolic murmur with transmission to the left and a markedly accentuated pulmonic second sound. There was present marked cardiac dilatation with decompensation. The pulse was regular as to rhythm. After the administration of digitalis the pulse became exceedingly irregular, the presystolic murmur disappeared and the venous tracing assumed the ventricular form.

This method will be found fully set forth in that author's recent communications on the subject.[3]

206 Liberty National Bank Building.

3. Mackenzie, James: Digitalis. Heart, ii, No. 4; Auricular Fibrillation, Brit. Med. Jour., Oct. 14 and 21, 1911.

Flies and Infection.—Where infectious material, as in open privies, exists in a community with exposed food-supplies, together with an abundance of flies, active measures against this insect are a public health necessity. The house-fly may be practically eliminated from municipalities by the proper construction of horse stables with especial reference to watertight, well-drained floors and the prompt removal of manure, the rendering fly-proof of surface privies and the abolition of garbage dumps. The burying of infectious material, if fly-blown, at any practical depth will not prevent either the maturing of the contained larvæ or the dissemination of infection by the flies hatched therefrom. Trapping, especially early in each fly season, is a practical auxiliary measure.—Terry in *Am. Jour. Public Health*, January, 1912.

SUCCESSFUL TREATMENT OF GONORRHEAL CHORIOIDITIS BY VACCINES

GEORGE W. VANDEGRIFT, A.M., M.D., NEW YORK
Instructor in Ophthalmology, Cornell University Medical College; Assistant Surgeon, New York Eye and Ear Infirmary

As far as I am able to ascertain, no case of gonorrheal chorioiditis has been reported in the ophthalmic literature for the last ten years. Metastatic iritis and conjuctivitis of gonorrheal origin have been reported by Posey,[1] Shumway[2] and others, and the possibility that the chorioid might become affected metastatically from the urethra as a sequel to arthritis has been suggested by DeSchweinitz.[3]

The etiology of the case I report is established firmly, not only by the therapeutic test but also by a positive complement fixation test. The clinical picture displayed was that of a localized chorio-retinitis attended by a severe hyalitis.

Patient.—A clerk, single, aged 35, referred by Dr. Charles E. Panoff of Brooklyn, consulted me Dec. 16, 1911, because the vision of the right eye had been failing for two months. The vision of the right eye was found to be 10/200; of the left eye 20/20. Externally both eyes were normal. Ophthalmologic examination showed the left eye normal. In the right eye the vitreous was heavily clouded with large and small floating opacities. The nerve-head could be distinguished too faintly for examination. After the vitreous cleared it was found normal. In the lower nasal peripheral aspect of the chorioid and retina, about two nerve-head lengths away from the papilla, a yellowish mass could be seen projecting into the vitreous. This mass appeared to be as wide as the nerve-head and its sides disappeared into the hazy vitreous.

Physical Examination.—The thoracic and abdominal organs were normal; also the nasopharyngeal tract and sinuses. Urinary examination showed normal kidneys, and there was no increase of indican. The patient's family history was negative; and the von Pirquet test was negative. He denied syphilis and the complement fixation test for lues was negative. He had never had rheumatism nor any acute infectious disease except three attacks of gonorrheal urethritis, the first of which was ten years previously lasting two months, the second six years ago and the last one year ago. At the time I first saw the patient he was under the care of Dr. Panoff for chronic prostatitis.

Before any general medication was begun the patient was referred to Dr. Hans J. Schwartz for a complement fixation test for gonorrheal infection.[4] This was strongly positive.

Treatment and Course.—Dr. Panoff's report of his examinations of the prostate and of injections of vaccines follows:

Dec. 9, 1911, expression of prostate showed great numbers of gonococci and staphylococci.

December 11 and 15, same.

December 22, injection of 0.25 c.c. mixed vaccines (Parke, Davis & Co.) equaling 100 million gonococci and 125 million staphylococci (*S.-albus, aureus* and *citreus*).

December 26, injection of 0.75 c.c.

December 29, injection of 1 c.c.

Jan. 2, 1912, injection 2 c.c.; massage examination negative.

January 9, massage examination showed no gonococci, few staphylococci.

January 16, prostate small and soft; no gonococci, no staphylococci.

January 20, massage negative.

January 26, injection 1 c.c.; massage negative.

February 1, injection 1 c.c.; massage negative.

February 9, massage negative.

April 15, complement fixation test slightly positive. This is no doubt a disappearing reaction from the vaccines administered January 26 and February 1.

May 15, complement fixation test negative.

The patient received local treatment of atropin in the affected eye but no general treatment other than that outlined above. About the middle of January the haze in the vitreous began slowly to clear and about the same time the exudate in the vitreous began to subside. Improvement continued until about April 1, when the vision was 20/20, the exudate completely absorbed leaving a white atrophic patch. A very few floating opacities still remained. At no time was any other structure of the eye inflamed nor was the other eye affected.

The gonorrheal origin of this case is undoubted. It is closely related to those of metastatic iritis and conjunctivitis reported by others. Many of these, however, were the sequel of arthritis which the case I report was not.

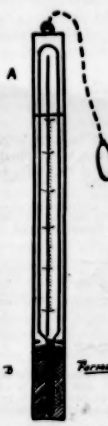
147 East Eighteenth Street.

1. Posey: Ann. Ophth., January, 1907.
2. Shumway: Ann. Ophth., April, 1910.
3. DeSchweinitz: Ann. Ophth., October, 1906.
4. Schwartz and McNeil: Am. Jour. Med. Sc., May, 1911.

AN ANTISEPTIC THERMOMETER CASE

EDMUND L. GROS, M.D., PARIS, FRANCE
Physician to the American Hospital

After having studied the question systematically, Beasley, in a recent article,[1] suggests, as the most practical disinfectant for thermometers, the Pharmacopeial formaldehyd solution (liquor formaldehydi), which, as is well known, is a 40 per cent. solution of formaldehyd in alcohol.



An antiseptic thermometer case.

For many years I have been accustomed to place a small cotton plug in the cap of my thermometer case, into which I poured, every week or two, a sufficient quantity of formaldehyd solution to saturate the cotton. Even after the lapse of two weeks the odor of formaldehyd is strong. Any ordinary thermometer case may be used for this purpose if the cap fits securely. All that is necessary is to wash the thermometer after use in running water and soap and to insert it in its case with the stem in contact with the cotton. My case is of metal (see illustration) with a screw-top *A* and a screw-bottom *B*. In the cavity *B* loose cotton is placed on which the formaldehyd solution is poured every week. The stem of the thermometer rests on this and the vapors of formaldehyd fill the case and sterilize every part of the thermometer.

23 Avenue du Bois de Boulogne.

1. Beasley, Edward A.: THE JOURNAL A. M. A., Oct. 21, 1911, p. 1257.

UNILATERAL CERVICAL ADENITIS*

HILBERT F. DAY, PH.B., M.D., BOSTON

The following case is reported because it is one of unilateral tuberculous infection of the tonsils with extreme reaction in the glands of the neck, which entirely subsided after removal of the point of entrance for the tuberculous infection without any change in the mode of living of the patient or subsequent treatment with tuberculin.

Patient.—On March 6, 1911, I was called to see Mrs. A. M., 38 years old, who said that lumps had first made their appearance on her neck three months previously. At first they had grown rather slowly, but recently the enlargement had been rapid.

Examination.—The patient was a somewhat emaciated woman who gave no history of recent illness. Lungs showed good resonance and respiration throughout. Heart area and action were normal. Abdomen was negative. There was nothing remarkable on the extremities. On the right side of the neck extending down from the parotid gland to beneath the clavicle on the anterior aspect of the neck were numerous hard, not tender and non-fluctuating swellings, varying in size from a rather deep node the size of a golf-ball to one about the size of a sparrow's egg at the level of the clavicle. There were no inflammatory symptoms. The examination of the mouth and throat showed the right tonsil to be considerably enlarged, extending toward the median line nearly to the uvula, with an inflammatory appearance. Some of the crypts

* From the Clinic of the Boston Dispensary.

in it were filled with a whitish material. The left side of the patient's neck and her left tonsil were apparently normal. No glands were palpably enlarged on that side.

Treatment and Course.—The diagnosis did not appear clear and in my mind lay between sarcomatous or tuberculous infection of the tonsil with secondary cervical adenitis, and I decided that the tonsils should be removed and examined. Dr. William E. Chenery, of Boston, operated on March 30, 1911, and enucleated the patient's tonsils, also removing slightly hypertrophied adenoids. Dr. Louis Hoag examined the specimens and reported tuberculosis of the right tonsil. The patient's fauces healed rapidly and the glands in her neck gradually subsided. When seen by me one year after operation her throat was clear and an examination of her neck showed only one or two glands which could be palpated, and these were no larger than cherry-pits, hard and not tender.

657 Boylston Street.

A SIMPLE DEVICE FOR COLLECTING URINE FROM FEMALE INFANTS

FRANK VAN DER BOGERT, M.D., SCHENECTADY, N. Y.

Feeling that anything which will render the collection of urine from infants more simple might encourage more frequent analyses by the general practitioner, I am led to describe a method for use in girl babies which has been exceedingly simple and satisfactory to me. The scheme was first brought to my notice by the father of a patient, a baby about 1 year old, whose urine on analysis showed much pus.

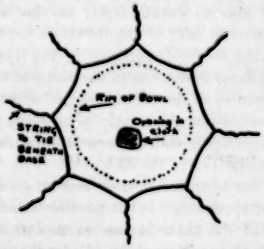


Diagram of cloth stretched over earthenware wash-bowl used for collecting urine from female infants.

After endeavoring to obtain a specimen by the usual simple methods, without success, the father tried the following: A firm cloth was drawn and tied tightly like a drum-head over the rim of an ordinary white earthenware wash-bowl. The baby, lying on this fairly comfortable affair, with diaper removed and clothing properly arranged, urinated on the cloth diaphragm, the urine dropping into the clean basin below. This arrangement had the disadvantage of filtering the urine and was, for this reason, no better than the method of placing absorbent cotton in the diaper, the cotton or filtering-cloth holding in its meshes such important elements as pus-cells. An opening, however, with a diameter of about 3 inches, placed eccentrically in the "drum-head" directly under the vulvæ, allows the urine to escape directly into the bowl, unfiltered.

Specimens thus collected must of necessity be somewhat contaminated, but with reasonable care, I think, no more so than those obtained by the various infant urinals, nor those by the test-tube method, or by the method of Lawrence of Boston, with the test-tube and rubber-glove finger, and these latter have the additional disadvantage of being more difficult of application. Catheterization is the only possible way of obtaining a sterile specimen.

The principal objection to the method suggested is the possibility of contamination by an accompanying stool, but this can, I believe, be disregarded except in severe diarrheal disorders, since another specimen can be so readily secured.

111 Union Street.

EPILEPSY (?) AND A REFRACTION*

JESSE S. WYLER, M.D., CINCINNATI

A case of supposed epilepsy was referred to me Oct. 29, 1909, for an ocular examination, by Dr. D. I. Wolfstein, of this city. The patient was a young man of 23, fairly well developed and nourished. He was accompanied to my office by his mother, who gave me the following history: Up to about a year and a half previously the boy had regularly attended to his work which was that of a skilled mechanic for a railroad company. Without warning one day he fell down unconscious and was brought home in a dazed condition. Following the attack, he seemed perfectly normal. These onsets followed more frequently until they appeared from three to four times daily. The young man was unable to work and was growing despondent. A premonitory cry was mentioned by the mother as the first sign of the approaching attack, and the condition during the seizure was that of a tonic convulsion; the duration from fifteen minutes to a half hour. No history of injury or previous ill health. It was also noticed that close application of the eyes, as in filing at his work or reading in the evening, had a tendency to produce the attacks.

I instilled scopolamin 0.2 per cent., three drops. Retinoscopy:

$$\text{R. E.} + 1.0 \text{ ——} + 0.5 \qquad \text{L. E.} + 1.25 \text{ ——} + 0.75$$

The ocular media were clear, the disk normal, veins slightly dilated, but not tortuous. Vertical muscles were normal with the following correction:

$$\text{R. E.} + 1.0 \text{ sph.} \frown + 0.5 \text{ c. } 90^{mm}/_{s}$$
$$\text{L. E.} + 1.0 \text{ sph.} \frown + 0.25 \text{ c. } 105^{mm}/_{s}$$

Esophoria 4°. The above correction, with + 0.5 D subtracted, was ordered for constant use and little hope extended that relief would be given from this measure.

One week later, the patient presented himself, feeling better; he liked the glasses and had had no attack since wearing them. Four months elapsed before I saw him again, he was still free from the former trouble. One year after this he complained that eyes drew a little; no attacks. He had gained about 20 pounds. I increased refraction + 0.25 Sph. Patient has now gone two and a half years without an attack of any kind and contemplates matrimony.

I offer no explanation, but merely present the facts as I found them. Cases of this nature were reported by Stevens as far back as 1876, but results were disproved by investigation of the New York Neurological Society. Inasmuch as neither Dr. Wolfstein nor I ever witnessed one of these seizures, we cannot positively assert that it was a case of epilepsy. At any rate, though I cannot speak of this case as cured epilepsy, still the refraction stopped the fits regardless of their etiologic factors.

* Read at the Cincinnati Academy of Medicine, April 23, 1912.

Exaggeration in Writing of Medical Advances.—There are among public sanitarians, particularly among those who occupy positions in municipalities, a large number of highly cultivated and scientific men, and in the majority of such instances the charge of exaggerating the importance and effect of their work cannot be sustained against them. The very difficulty of carrying into execution the simplest principles of their science teaches them a demeanor of conservatism and humility. But to the dilettante or amateur in hygiene nothing is impossible in sanitary science. No human plague exists which cannot be scientifically eradicated if only the rules which they propose are followed. . . . The truth is that the many problems relating to public health and hygiene can only be solved a little better in each generation as the science on which they are founded develops, and a clean confession of the limitations of our knowledge can only be productive of good. The public naturally loses confidence in medical science when annually for a given calamity a new remedy is proposed, hailed first as a panacea but soon dropped for something else. All our remedies to lessen the mortality of infants, from mathematical feeding to pasteurization, have been heralded as panaceas instead of as mere experiments to be carried out on the body instead of on the guinea-pig.—W. M. Barton in *Washington Med. Ann.*

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[For other information see second page following reading matter]

SATURDAY, JUNE 8, 1912

THE ANAEROBIC BACTERIOLOGY OF APPENDICITIS

The causation of appendicitis and of the consecutive peritonitis still constitutes a field for hypothesis and active investigation. It has been asserted recently that appendicitis is the result of a kind of intestinal occlusion and also that it is of hematogenous origin. The inapplicability of the first view to most cases of appendicitis becomes apparent when we consider the essentially active nature of the process, which is infective and inflammatory. And the kind of bacteria commonly found in appendicitis would seem to preclude the idea that it is of hematogenous nature, except possibly in the most exceptional instances. This conclusion would seem to be fully justified from the results about to be presented briefly of one of the very latest and most thorough studies of the bacteriology of appendicitis, namely, that of Heyde.[1]

In this study anaerobic methods were employed and it is the emphasis placed on the anaerobic bacteria that gives to this work its chief value. Heyde finds that these bacteria play a predominating rôle in appendical and consecutive peritoneal infection. Their source is the intestinal contents, and the finer mechanisms of acquirement of virulence and of invasion of the tissues are still obscure, although much that is interesting and suggestive might be advanced by way of speculation. The outstanding fact is that in the beginning of the process and at the margins of the advancing peritonitis the bacteria present may be altogether or at least predominatingly anaerobic in character. It is inadvisable to go into details; the bacteria concerned are the gas bacillus (*B. welchii*), fusiform bacilli, and other anaerobes including the anaerobic streptococcus, but this order does not indicate the order of the frequency of their occurrence or their importance. It seems that some at least of these bacteria have the power to cause a direct necrosis with decomposition—gangrene—of the appendix.

Acute appendicitis is associated usually and early with a peritoneal exudate, which by some is claimed to be sterile in the first stages; but Heyde finds that anaerobes may be present. To regard the exudate as sterile in the early stage consequently is unwarranted, because anaerobes rapidly pass through the walls of the appendix. As the peritonitis spreads, the recent exudate contains a relatively small number of bacteria, while in the older exudate the number is greater, anaerobes as a rule being in excess, however, of the aerobes. It is said that the anaerobic infection develops on the basis of the aerobic, but this cannot be the case, because anaerobes are present in predominating numbers in the earliest stages and at the periphery of the peritonitis. It is also stated that the anaerobes are of no real importance, because early removal of the appendix results in recovery. This objection is without force, however, because by removal of the appendix the source of the bacteria is removed as well as their opportunity to grow in virulence.

In order to determine definitely the relation between the different kinds of anaerobes and different forms of appendicitis and peritonitis the investigation of still more series of cases is necessary. Previous investigations indicate that the results which would be obtained by different workers might differ considerably. Such differences might depend on the methods used, on the different stages of the process at which the examinations would be made, and also no doubt largely on the circumstance that the bacterial flora of the intestines depends on the nature of the food. Differences in the diet would be expected to cause differences in the bacterial content, and hence differences in the bacteriology of appendicitis. It is quite possible that the occasional apparent contagiousness of appendicitis and its occurrence in families may rest on peculiarities in the diet.

Enough has been said to show that an accurate understanding of appendicitis is not possible without due consideration of the anaerobic bacteria. Indeed, it seems that in these bacteria we must seek for the source of the severe intoxication from which the patients with appendicitis suffer and in the study of the anaerobes must be sought also a better knowledge of the peritoneal inflammation arising from the appendix. That the continuation of the investigation of appendicitis along the lines followed by Heyde and other students of the anaerobic bacteria eventually may influence our treatment and our prognosis can hardly be doubted.

1. Heyde: Beitr. z. klin. Chir., 1911, xlvii, 1.

MOSQUITO EXTERMINATION

Mosquitoes can be — indeed, are being — eliminated from human experience in the United States. The "Jersey mosquito" is not the exclusive property of that commonwealth alone; it breeds in the salt-water marshes all the way from Massachusetts to Florida, wherever a fresh-water stream dilutes the ocean saltiness sufficiently to attract the mosquito. Mosquitoes of the salt-marsh group (chiefly *Culex salinarius, Ochlerotatus sollicitans* and *O. cantator*) are not disease-breeding, however, though more intensely annoying than others. The *Anopheles*, which spreads malaria, and the *Stegomyia*, which conveys yellow fever, propagate in fresh water, in

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stagnant pools, even in standing water in houses. The greater number of species seldom travel more than a few hundred yards from their breeding-places and, away from salt marshes, most places are locally infested; these facts place the problem of mosquito extermination squarely before the individual householder and the community immediately interested.

Most mosquitoes — certainly those of the anopheles tribe, in which the female of the species is far more deadly than the male — are active only after dark. To rid a house of them, one must fumigate with pyrethrum powder or some other substance that will make a dense smoke, taking care that no mosquitoes are allowed to lurk in remote places to which the fumes have not access. A pound of pyrethrum is necessary for every thousand cubic feet of interior space. Screens, unless absolutely tight, with a mesh of twenty to the inch, are useless against mosquitoes.

The only means whereby mosquitoes can be permanently prevented is the destruction of their breeding-places, which may be anywhere that water can accumulate and stand for ten days or more. It is very well to drain marshes, ponds, fountains and wet places in lawns and gardens; but extermination will not be thorough and effective unless one realizes that no body of water can be too small for a mosquito nursery. Myriads may breed in puddles by the roadside; in little-used horse-troughs; in chicken-pans in poultry-yards; in water-cups standing on the frames of grindstones; in water that accumulates in furrows in gardens or fields, especially in clayey soil; in water-pitchers in unused guest-rooms; in vases in which water has not frequently been changed; in discarded tin cans in back yards; in sewer catch-basins —in fact, in any place where half a pint of water is allowed to stand.[1] Since mosquitoes breed only in standing water, to eliminate them it is necessary simply to find and to drain or to oil all the possible breeding-places.[2]

The city of Hartsville, S. C., little as to size, but big in enterprise, has for several years past annually employed measures which other communities may well emulate. Its health board first distributed to all householders circulars pointing out the dangers of mosquitoes and recommending screens and constant supervision of premises to prevent breeding. Then the council surveyed the entire city, drained low places where rain-water accumulated and made weekly inspections of all premises and ditches in town, putting kerosene regularly on any water that could not be drained or emptied (an ounce of kerosene for each 15 square feet of water surface). Most of the breeding-places were found in back yards. Dr. W. Egleston, the health commissioner, reports that malaria, though very prevalent a decade ago, is now a practically negligible disease. The inhabitants of Hartsville, it is said, now sit on their unscreened porches in the evenings with no discomfort from mosquitoes. If every community in the country would follow the example of Hartsville, the mosquito problem would soon cease to vex us.

1. Stockbridge, F. P.: How to Get Rid of Mosquitoes, World's Work, May, 1912.
2. An excellent discussion of the mosquito problem, including protection from bites, smudges and fumigants, abolition of breeding-places, etc., is "Remedies and Preventives Against Mosquitoes," by L. O. Howard (Farmers' Bulletin 444, U. S. Dept. Agric.).

THE CONDITION OF THE BLOOD DURING RESIDENCE IN THE TROPICS

Since January, 1909, the U. S. Army Board for the Study of Tropical Diseases as They Exist in the Philippines has made extensive observations to determine whether Americans of the blond type suffered more than the brunettes from the deleterious influences attributed to tropical climate and to discover whether or not the wearing of orange-red underclothing, which obstructs the passage of the actinic rays of the solar spectrum, was of any benefit to white soldiers serving in the Archipelago.[1] In the course of this work many data were collected bearing on some special features of the physiologic activity of white men living in the Philippines. Fragments of these laborious and useful investigations (which further attest the scientific spirit that has from the very start actuated our medical colleagues detailed to meet the hygienic situations in the Far East) have lately been presented, bearing on blood conditions observed among healthy American soldiers and Filipino members of the Philippine Scouts and constabulary in our insular possessions[2]. It was found that the blood-pressure of Americans residing in the Philippines differs little if at all from the average at home. Usually the lowest readings were obtained in the first three months of tropical residence, but there was no progressive tendency for the pressure average to rise or fall with increased length of residence. The pressure was lower during the hottest part of the year, but the difference was very slight. A well-marked tendency for blood-pressure to rise with increasing age was apparent in both races. Complexion type or special types of clothing to counteract the actinic rays of the sun were without appreciable influence. The pulse-rate of active Filipinos and Americans living in the islands averaged a few beats above the usual standard of 72 per minute.

The observations on the red blood-corpuscles and the hemoglobin content are particularly interesting. There was a time when so-called "tropical anemia" was supposed to be caused by climate alone. Major Chamberlain points out that most of the conditions formerly so designated are in reality instances of secondary anemia due to infections with various parasites, notably plasmodia and uncinaria. The new statistics of the

1. Cf. Complexion and Health in the Tropics, THE JOURNAL A. M. A., June 1, 1912, p. 1688.
2. Chamberlain, W. P.: A Study of the Systolic Blood-Pressure and Pulse-Rate of Healthy Adult Males in the Philippines, Philippine Jour. Sc., Sec. B, 1911, vi, 467; The Red Blood-Corpuscles and the Hemoglobin of Healthy Adult American Males Residing in the Philippines, Ibid., p. 483.

Army Board are valuable because the number of men observed—over 700—is so large that the element of chance is eliminated. After twenty months of Philippine service healthy American soldiers living near the sea level and averaging 26 years of age show:

1. A red-cell count averaging 5,200,000 per cubic millimeter, and rarely falling below 4,500,000.

2. A hemoglobin reading averaging 89.6 per cent, and rarely falling below 85 per cent.

3. A color index averaging 0.86 or 0.87.

Such a red-cell count, Dr. Chamberlain concludes, "does not differ from the normal at present recognized for healthy young men in the temperate zone. The hemoglobin percentage and the color index are probably a little low, but not sufficiently so to indicate a definite anemia. The pallor not infrequently met with among apparently healthy persons in the tropics we believe to be due as a rule to superficial ischemia and not to a deficiency in the total quantity, or in any particular constituent, of the blood."

QUACKERY ABROAD

Quackery flourishes the world over. European countries, where on account of strong paternal governments many things are managed well, are not free from this pest. Quacks thrive in England, Germany and other countries of Europe, but benighted Russia seems to keep them in leash better than most other countries. As far back as 1788, laws were provided in Russia protecting the people from all forms of irregular practice, and such laws have continued to hold a restraining hand on quackery down to the present time. By the application of a well-known modern political method, however, a "joker," which affords a loophole for a certain amount of irregular practice, has been inserted into some of the laws regulating the practice of medicine. Still, the number of quacks in Russia who do business on a large scale is small.

In Germany during the early part of the nineteenth century, laws against quackery were stringent and effective, but curiously enough, at the instance of the medical society of Berlin in 1869, the regulations against irregular practice were much relaxed and the result was a tremendous development of quackery in Germany. Berthenson[1] says that in 1869 the number of quacks in Berlin was twenty-eight. In twenty-four years the number was over a thousand and the whole number practicing in Prussia was over five thousand. In certain districts the number of irregulars outnumbered the qualified practitioners, two to one. In 1906 it was estimated that the number of quacks in Prussia was 10,000 and the scope of their practice had become unlimited. The unqualified practitioners are regularly organized and have schools and institutions providing a four months' course for quacks; there are over 800 societies for study in "nature healing" with a total membership of 112,000. There are over fifty periodicals with millions of circulation. The quacks come largely from the uneducated class, and it is said that over 58 per cent. of the female irregulars have been domestic servants. This condition has led to efforts to amend the laws in such a way as to limit the practice of these people to the minor ills. This has led to strongly organized opposition, similar to the League for Medical Freedom in our country, and, as in the case of our own Congress, the opposition has found support in the Reichstag. This feeling was shown by the chilly reception which the first reading of the proposed legislation received in that body, the same reason being ascribed as here, namely, that the measure would create a "medical trust."

The forces of graft and unrighteousness are peculiar to no country or clime, and they have their champions in the high places and the low. Until the people themselves are better educated concerning the danger and iniquity of quackery, they must be protected from the forces that prey. The popular understanding of these matters is becoming better every day, and, aided by proper laws, the time will come, perhaps, when quackery will be unprofitable.

1. St. Petersburger med. Wchnschr., 1911, No. 9; Brit. Med. Jour., May 11, 1912.

Current Comment

PRESIDENT JACOBI'S ADVICE FOR THE PRESERVATION OF INFANT LIFE

Like all that Dr. Jacobi writes, his presidential address is interesting. In this case, however, there is an added attraction because of the somewhat unconventional treatment of the subject. Sociologic facts are usually far behind medical ideals, and the prospect of their immediate betterment is not always favorable. This is strikingly shown in the address. If, as Dr. Jacobi says, half the births in this country are attended only by midwives (86 per cent. in Chicago), the abolition of the midwife is not likely to be a very sudden consummation, nor is it practically desirable, taking into consideration the welfare of the entire people. The vast majority of births are naturally among the poorer classes, including those foreign-born residents among whom it is customary to depend on the midwife in labor. Where we fail is in not sufficiently recognizing the necessity of the midwife and in not having her properly trained. European countries are far ahead of us in this respect. Germany has had her midwifery schools for more than a century; but in this country how many are there and how long have they existed? As Dr. Jacobi says, "We think nowadays that the ocean is only a short bridge; but the experiences of Europe, established on a solid and constant foundation, do not travel on it." At least some of them do not, and we have to confess it to our shame. If we would teach the midwives their duties as laid down by Dr. Jacobi, we would probably learn to

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consider them useful auxiliaries and a benefit to humanity. The midwife question is, as he says, one of the simple questions of medicine that cannot be considered without the consideration of social questions also. It is the same with the question of rest for the mother. If we demand rest for the mother, what shall we do to provide it for the overtasked housewife or the working woman who has to be the family provider? We are still a long way from our ideals, and it will do us no harm to recognize this fact. Every one will, we think, agree with Dr. Jacobi's statement of the superiority of maternal nursing over any artificial method. Some may, however, be not quite so optimistic as he as to its universal practicability. The illustration he gives, however, of the siege of Paris, when, owing to most unfavorable conditions, maternal nursing was the only recourse and was attended with a great reduction of infant mortality, is a very striking evidence of the possibilities. Too many babies are deprived of a large proportion of their chances of life by neglect to nurse them on the part of mothers who are capable of doing so. Perhaps as a profession we have not insisted enough on this point. Physicians are sometimes accused of losing touch with the practical relations of life, and of prescribing what would theoretically be good for the patient without regard to his ability to obtain it. Dr. Jacobi's address, with its sharp insistence on practicality, should be a wholesome tonic for any tendency to forget that medicine should be the servant of every-day life.

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BOILED MILK IN INFANT-FEEDING

Some recent experiments in the feeding of infants would seem to indicate that our previous ideas in regard to the unsuitability of boiled milk may have to be modified. In a report to the Local Government Board (England), Dr. Janet E. Lane-Claypon[1] sets forth the results of interesting experiments, chiefly by Germans, showing that breast-feeding is best for the young of all mammals, especially during the early weeks of life, as of course was known. It was found by Thiemich that human infants as well as other young animals throve best on the milk of their own species, but that boiling of the milk, either human or other, made practically no difference. It was thought that when the boiled milk of a foreign species was fed to infants, owing to the difference in the composition of the milk, the boiling would have a more appreciable effect. This, however, was found likewise not to be the case. This is also the observation of Finkelstein. The observations of Dr. Lane-Claypon are founded on the records of Ballin in Berlin among the children of the working class, one series being breast-fed and the other on the milk from the municipal dairies which contained 3 per cent. of fat and 20,000 to 30,000 bacteria per cubic centimeter. This is milk of high purity and is produced and handled by scientific methods. It was found that the breast-fed children did not have so great a physiologic drop in weight immediately after birth as did those artificially fed on boiled cow's milk, and the weight curve steadily increased. In those fed on boiled cow's milk, the drop in weight in the early days was very considerable, but by the end of the two hundred and thirtieth day, the difference was no longer present and no difference was to be noted down to the end of the first year, except possibly a slight variation in favor of the boiled milk. An examination at the end of twelve months did not show any greater percentage of rickets in the babies fed on boiled milk than in the breast-fed infants. As pointed out by Dr. Lane-Claypon, however, these conclusions in regard to boiled milk may not be applicable to the whole population, since the results may have been influenced somewhat by the good medical care or supervision given the infants. The findings are interesting, however, in view of the previous conclusions as to the rôle of boiled milk in producing constipation or other digestive disturbances and rickets. They are important also as indicating that boiling may, without impairing the nutritive value of the milk, be substituted for pasteurization, which, unless carefully and properly done, does not destroy all deleterious bacteria and spores. In the light of these experiments, it would appear that boiled milk would be preferable to pasteurized.

1. Reports to the Local Government Board on Public Health and Medical Subjects, new series. No. 63.

A STATE FAMILY BIBLE

Kentucky is one of the southern states which has recently adopted a modern law for the registration of vital statistics. Put into force a little over a year ago, it has been on trial. As usual, it encountered opposition. Some people were unable to see why births and deaths should be recorded; others did not like to go to the trouble to make out an orderly record of these occurrences. Because physicians and medical organizations led the way in securing this needed legislation, it was, of course, regarded as something for the benefit of physicians rather than for the public good. Shakespeare asked—and so have many philosophers since his time—"What's in a name?" and the wisest of these inquirers have recognized the importance of naming a thing properly, if it is to stand well in the public eye. Evidently this fact is recognized in Kentucky. The leading editorial in the May 1 issue of the *Kentucky Medical Journal*, under the heading "Name the Babies," discusses some of the difficulties encountered in putting the new law into effect. In this connection, the editor philosophically refers to the State Bureau of Vital Statistics as "Kentucky's Big Family Bible." A happier name could not well be devised. When the people of Kentucky understand that the object of birth registration is to record the name and date of arrival of each little citizen of Kentucky, so that its legal identity may be established, and that the state is simply exercising the same care that leads a father to inscribe each birth in the family Bible, public support of the measure will be increased and assured.

SHOULD THE STATE PAY THE PHYSICIAN?

That the state should pay the physician, though a socialistic doctrine, is the belief of the editor of the Cuban *Revista de Medicina y Cirugia*. He says that the health of the people is the supreme asset of a country, and that those whose services are devoted to maintaining

it at its highest point should be recompensed by the public when the individual patient is unable to do this. In Cuba, the editor declares, the public health has been so improved by the measures adopted by the sanitary authorities that the physicians have less and less to do and are consequently passing through a serious economic crisis. All of these measures are socialistic, he says, including the establishment of hospitals, day nurseries, milk stations, etc. Thus socialism is accomplishing a bloodless revolution. Gradually, almost without realizing it, the most advanced civilized nations are progressing toward socialism, and in medicine, more than in any other profession, he notes this socialistic evolution. He believes that professional services should never be rendered gratis, but that if an individual too poor to pay receives the benefit of such services the state is under obligation to pay for them. All of which may be true in theory.

THE ASSOCIATION IN SESSION AT ATLANTIC CITY

The American Medical Association is holding its sixty-third annual session this week at Atlantic City, N. J. As we go to press, telegraphic advice is received that the meeting is an enthusiastic one, well attended, and that it is favored by delightful weather. The House of Delegates met on Monday so as to get a considerable portion of work done before the commencement of the scientific proceedings on Tuesday. A report of the first meeting of the House of Delegates is given in this issue, commencing on page 1783 and including the reports of the Secretary, the Board of Trustees, etc. The report will be continued in THE JOURNAL next week. On Tuesday morning at 10:30 the scientific proceedings of the session opened with the General Meeting. At this meeting President-Elect Jacobi was installed in office and became President Jacobi. The splendid address which he delivered is published in this issue. Governor Wilson was one of those who welcomed the Association to Atlantic City, and he was given a great ovation by the audience. The attendance at the general meeting was unusually large. President Jacobi was warmly received by the House of Delegates when he took the chair of that body. Tuesday afternoon the various sections held their opening sessions, and there seemed to be an unusual spirit of interest in their work. There are fourteen sections this year, each with a good program. On Monday a series of clinics was held on the Steel Pier, in accordance with the program published in THE JOURNAL, May 4. One of the papers read, that by Dr. John F. Anderson, Washington, D. C., of the U. S. P. H. & M.-H. Service, appears in this issue of THE JOURNAL. The registration on Tuesday was about the same as three years ago, which means a large meeting. Further details will appear next week.

The State Board of Health.—The Board of Health is the only state department which is charged with the grave duty of safeguarding the public health. That this department should be maintained under a law which permits it to be buffeted about at the caprice of party demand or to meet the exigencies of party obligations is fundamentally wrong. Furthermore, such a condition of affairs stands as a positive menace, rendering possible, if not actually inviting, the very dangers which the department was established to prevent.

Medical News

ARKANSAS

New Officers.—Clark County Medical Association at Arkadelphia, May 9: president, Dr. E. K. Williams; secretary, Dr. C. A. Evans.——Pope County Medical Society at Russellville, May 4: president, Dr. C. R. Teeter, Pottsville; secretary-treasurer, Dr. D. J. B. Ferguson, Russellville.——Howard County Medical Society at Nashville, May 3: president, Dr. T. F. Alford, Murfreesboro; secretary-treasurer, Dr. E. C. Dilvey, Nashville.——Yell County Medical Society at Ola: president, Dr. C. B. Linzy, Plainview; secretary-treasurer, Dr. J. R. Linzy, Dardanelle.——Tenth Councilor District Medical Society at Springdale: president, Dr. D. R. Dorente, Fort Smith; secretary, Dr. J. A. Fergus, Rogers.——Miller County Medical Society at Texarkana: president, Dr. J. A. Lightfoot; secretary, Dr. L. J. Kosminsky.

Medical Corps Officers Named.—In the reorganizing of the Medical Corps, N. G., Arkansas, the following appointments are announced: Colonel, James C. Minor, surgeon-general; majors, Leonard R. Ellis, first regiment; William F. Bakersville, third regiment; William H. Abington, second regiment; staff captains, Abner H. Cook, executive officer; Sigmurd Ekdahl, medical supply officer; captains, Jasper E. Pringle, third regiment; Samuel E. Miller, first regiment; Robert Cowger, second regiment; Austin R. Hedrick, third regiment; Martin J. Barlow, first regiment; Joseph A. Robertson, second regiment; lieutenants, William R. Brewer, first regiment; B. F. Junkind, second regiment. The following officers were named on the reserve list: Major Clint P. Meriwether; captains, Estik D. Hollahd, Eli B. Bledsoe and W. H. Laird.

ILLINOIS

Chicago

Hospital Benefit Performance.—The third annual benefit performance given under the auspices of the Jewish Consumptives' Relief Society of Chicago, May 26, at the Colonial theater, netted over $3,000, of which more than $2,000 was derived from the sale of seats and $1,000 from the program returns.

Personal.—Drs. Stephen R. Pietrowicz and Gustavus M. Blech have been appointed members of the consulting staff of the County Hospital. Dr. Pietrowicz is superintendent of the Dunning Insane Asylum and Dr. Blech is director of the Red Cross Field Corps.——Dr. and Mrs. Frederick Cleveland Test and family, together with a party of friends, sailed for Europe, May 25.

INDIANA

New Officers.—Eighth District Medical Society at Anderson, May 9: president, Dr. M. A. Austin; secretary-treasurer, Dr. Fred M. Ruby, Union City.——Ninth Councilor District Medical Society, Frankfort, May 16: president, Dr. W. R. Moffitt; secretary-treasurer, Dr. Dinsmore, Hunter's Springs.

Personal.—Dr. J. L. Freeland, superintendent of the Indianapolis City Hospital since 1907, has resigned, to take effect July 15. Dr. John W. Sluss, professor of surgery at the Indiana University School of Medicine, is the choice of the members of the board of health to be his successor.

Health Officers Meet.—The Indiana Health Officers' School, at its annual session held at the Denison Hotel, Indianapolis, was addressed by Dr. W. C. Rucker, assistant surgeon-general of the United States Public Health and Marine-Hospital Service. The Owen bill was endorsed by resolution and the following legislative committee was appointed: Dr. Simon J. Young, Valparaiso, chairman; Dr. M. J. Compton, Evansville, and Dr. Hugh Cowing, Muncie.

Hospital Notes.—The new St. Vincent Hospital at Indianapolis, erected at a cost of more than one-half million dollars, and the new south wing of the Methodist Hospital have been completed and soon will be occupied.——Work will soon be begun on the new ward for the Indianapolis City Hospital.——Plans are being prepared for the State Hospital to be erected near the Indianapolis City Hospital.——Articles of incorporation have been taken out by Dr. C. F. Voyles for a private hospital to cost $10,000.

KENTUCKY

Dairy Cattle Retested.—The health officer of Louisville has ordered the retesting of all dairy cattle which furnish milk to the city.

Personal.—Dr. A. P. Taylor, Lexington, had a narrow escape from death May 25, when his automobile turned over

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and pinned him underneath it. He was rendered unconscious, but his injuries were not very serious.

New State Veterinarian.—Robert Graham, Lexington, has been elected state veterinarian under the State Board of Health, vice Dr. F. T. Eisenman, Louisville, resigned. Dr. Eisenman will continue to serve under the State Board in Jefferson County in connection with the Fiscal Court and the Health Department of Louisville.

Hospital Contract Let.—The contract for the erection of the new Waverly Hill Hospital for the care of advanced cases of tuberculosis, has been awarded for $22,000. The building is to be two stories in height, of concrete, brick and stucco construction, will be situated on a spur of the hill, southwest of the present building, and will accommodate forty-eight patients.

Notification and Placarding of Communicable Diseases.—The Council of Louisville has passed an ordinance requiring physicians to report in writing to the Health Department all patients suffering from diphtheria, diphtheritic croup, scarlet fever, small-pox, varioloid or cerebrospinal meningitis, and providing for the posting of warning placards on premises where communicable diseases exist.

New Officers.—Graves County Medical Society, at Mayfield: president, Dr. John G. Puryear; secretary-treasurer, Dr. Richard Keys, both of Mayfield.——Eagle Valley Medical Society, at Carrollton, May 23: president, Dr. C. H. Duvall, Warsaw; secretary-treasurer, Dr. J. W. Botts, Owenton.——Southwestern Kentucky Medical Association, at Paducah, May 21-22: president, Dr. Clyde E. Purcell, Paducah; secretary, Dr. C. P. Burnett, Paducah.

MARYLAND

Personal.—Dr. John Raymond Downes, Preston, has been appointed health officer of Caroline County.——Drs. Curtis F. Burnham, Baltimore, and V. M. Reichard, Fairplay, were appointed members of the board of managers of the Maryland State Tuberculosis Sanatorium.

New Hospital for Insane.—Plans for the establishment of the Eastern Shore Hospital for the Insane, authorized by the last legislature, have been commenced. The institution will be located in Dorchester County and Dr. Charles J. Carey, first assistant physician at the Springfield State Hospital for the Insane, Sykesville, is to be superintendent.

County Hospital Opened.—The new Washington County Hospital, Hagerstown, was formally opened May 14. The building, formerly the Kee-Mar College and erected about sixty years ago, has been remodeled. It stands in the center of an eleven-acre campus and the property costs with improvements about $75,000. The association also owns 76 acres in the northern part of Hagerstown, for which it paid $37,000.

Baltimore

Endowment Fund for University.—Dr. J. Randolph Winslow reports that the pathologic endowment fund of the University of Maryland collected by him up to May 1 amounts to $9,895.50.

Zone of Quiet Established.—By authority of an ordinance passed by the city council last winter, street signs are to be erected at hospital zones established by the health commissioner, each sign to bear the notice "Hospital Zone, Unnecessary Noises Prohibited."

Gift to Hospital.—The South Baltimore Eye, Ear, Nose and Throat Charity Hospital has received a gift of $10,000 toward the $50,000 building planned for it. It is the only hospital in the southern section, and was opened eleven years ago by Drs. James Bordley, Jr., and H. E. Peterman.

Personal.—Dr. John Turner has been appointed physician to the new Gunpowder Dam Construction Camp.——A party of Baltimore physicians, including Drs. Cushing and Finney, will leave for Europe, June 11.——Drs. William Geraghty and William I. Driscoll have received appointments to the staff of St. Joseph's Hospital.

Physician Gives Dinner.—Dr. Howard A. Kelly gave a dinner at the Belvedere Hotel, May 25, to about sixty persons, "to promote the spirit of cooperation among magistrates of the city and city officials dealing with social conditions." Among those present were the governor, members of the supreme bench, police board and liquor license board, judges of the people's court, police magistrates and representatives of the city charities.

Commencements.—The Baltimore Medical College held its commencement, Tuesday, June 4, with twenty-six graduates.——The Maryland Medical College had eighty-two graduates at its commencement, June 3.——At its commencement, June 1, the University of Maryland conferred the honorary degree of M.D. on Prof. R. Dorsey Coale, dean of the department of medicine. Dr. Coale was the first graduate of Johns Hopkins, receiving the Ph.D. from that college.

MASSACHUSETTS

New Medical Library.—The Lawrence General Hospital has established the Frank B. Flanders Medical Library. This was made possible by the gift of Mrs. Flanders, which included the valuable library of the late Dr. Frank B. Flanders, who was a member of the hospital staff for thirty years, its secretary for fifteen years and for twelve years the senior surgeon of the hospital.

New Officers.—North Essex District Medical Society, at Lawrence: president, Dr. W. H. Merrill; secretary-treasurer, Dr. J. Forrest Burnham, both of Lawrence. Resolutions were adopted favoring the Owen Bill providing for national health service and a certified milk committee was also appointed.——Bristol South District Medical Society, in Fall River, May 9: president, Dr. Michael Kelly; secretary-treasurer, Dr. A. J. Abbe, both of Fall River.

Hospital Notes.—The State Board of Health has requested Attleboro to make provision for the establishment and maintenance of a hospital for the care of contagious diseases in accordance with the new state law.——The trustees of the Springfield Hospital are making plans for the future of the institution, which will eventually call for a hospital with 1,200 beds and many special buildings. A memorial building to the late Dr. Frederick W. Chapin will be the first of the buildings to be erected. This is to cost $75,000, of which $57,000 is already available.

MISSOURI

Hospital Reopened.—The Levering Hospital, Hannibal, which was seriously damaged by fire, February 13, was reopened for patients May 1. The damage done by the fire is not entirely repaired, but more patients will be received as the work is carried on toward completion.

Antituberculosis Work.—At the annual meeting of the Buchanan County Society for the Relief and Prevention of Tuberculosis, held in St. Joseph, May 14, Dr. O. B. Gibbart was reelected secretary, Dr. J. K. Graham was elected director, and Dr. T. A. Shipley was elected director, vice Dr. D. G. Moberly, deceased.

New Officers.—Fourteenth District Medical Association (Saline, Lafayette and Cooper counties) organized at Marshall, May 10: president, Dr. C. T. Ryland, Lexington; secretary-treasurer, Dr. John R. Hall, Napton.——Southeast Missouri Medical Association, at Farmington, May 9: president, Dr. W. S. Hutton, Farmington; recording secretary, Dr. F. L. Finley, Anniston.——Southwest Missouri Medical Association, at Springfield, May 10: president, Dr. T. A. Coffelt; secretary, Dr. H. S. Hill (reelected), both of Springfield.

MONTANA

Personal.—Dr. Herbert F. Judd, formerly resident physician at Hunter's Hot Springs, has been appointed medical director at Corwin Hot Springs.——Dr. A. A. Dodge, Great Falls, has been appointed surgeon for the camps of the Moccasin Branch of the Great Northern Railroad extension.

New Section Organized.—The eye and ear specialists in attendance at the meeting of the Montana State Medical Association organized a section on ophthalmology and otolaryngology and elected Dr. John A. Donovan, Butte, chairman, and Dr. Charles F. Jump, Bozeman, secretary.

New Officers.—Lewis and Clark County Medical Association, at Helena: president, Dr. Rudolph Horsky; secretary-treasurer, Dr. B. V. McCabe, both of Helena.——Cascade County Medical Society, at Great Falls, May 7: president, Dr. J. H. Irwin; secretary-treasurer, Dr. P. F. Kearney, both of Great Falls.

NEW JERSEY

Field Hospital Organized.—In order to conform to the standards of the regular establishment, Major Harold D. Corbusier, formerly of the medical corps of the army, has organized a field hospital for the national guard of the state.

New Officers.—Warren County Medical Society, at Belvidere, May 7: president, Dr. Frank S. Gordon, Blairstown; secretary, Dr. William J. Burd, Belvidere.——Salem County Medical Society, at Salem: president, Dr. William T. Hilliard; secretary-treasurer, Dr. Henry Chavanne, both of Salem.——Mercer

County Medical Society at Trenton, May 14: president, Dr. Chas. H. Holcomb; secretary, Dr. Frank G. Scammell.——Sussex County Medical Society, at Newton, May 14: Dr. Edward A. Ayers, Branchville; secretary, Dr. F. G. Wilber, Franklin. The following were made members of the Milk Commission: chairman, Dr. Edward A. Ayers, Branchville, and Drs. H. D. von Gassbeck, Sussex, Charles M. Dunning, Franklin Furnace, and J. G. Coleman, Hamburg.

NEW YORK

New Hospital at Prattsburg.—The Misses Nora L. and Julia D. Trant, graduates of the Buffalo Hospital Training School for Nurses, have opened a private hospital in Prattsburg.

Tuberculosis Hospital in Auburn.—The Sunny Crest Tuberculosis Hospital has been opened by the city of Auburn, and Dr. Alfred F. Hodgman has been appointed physician in charge.

Camp Sites Selected.—The Dunkirk Tuberculosis Committee has selected the Gross Farm on Roberts road, as the site for the proposed tuberculosis camp. It is planned to treat all Dunkirk patients free of charge and to make a nominal charge for out-of-town patients.

Militia Medical School.—Peekskill camp is to be used as a school for medical officers, June 22 to 29. Majors Albert E. Truby, Louis T. Hess and Henry H. Rutherford and Capt. James M. Phalen, Medical Corps, U. S. A., have been detailed by the war department as instructors.

Hospital to Be Opened.—A certificate has been filed permitting Drs. William L. Wallace, Herbert O. Brust and Carl E. Muench to conduct a hospital in Syracuse under the name of the Crouse-Irving Hospital. The building has cost about $125,000 and has sixty private rooms in addition to the operating rooms, offices, etc.

Faculty Appointments.—At the meeting of the faculty of Albany Medical College, May 10, the announcement was made of the appointment of Prof. Henry Berstein, at present director of Bender Laboratory, as professor of pathology and bacteriology, vice Prof. Thomas Ordway, resigned, and Prof. R. W. Keeton of the University of Illinois as adjunct instructor in experimental physiology and physiologic chemistry.

Plan to Deport Alien Insane.—A conference was held on May 24 between the representatives of New York steamship lines and state insane hospitals, which, it is believed, will result in the deportation of 2,000 insane aliens during the coming year. The steamship companies have agreed to take the aliens at ordinary steerage rates to be paid by the state, so long as they are notified of the insane person's condition beforehand and are assured that the alien has no dangerous mania. There are at present 14,000 foreign-born insane in the hospitals of New York, and it is estimated that the deportation of even 2,000 will represent a saving of $7,000,000 to the state.

New York City

Pure Water for City.—New York City is to have a pure water-supply at last. An appropriation of $8,690,000 has been made for the installation of a filtration plant in Jerome Park in the Bronx.

Death-Rate Down.—For the fifteenth consecutive week the death-rate has remained below that of 1911. There has been a decrease in the death-rate from 16.27 to 14.75 for the week ending May 19. For the first twenty weeks of this year the rate has averaged 15.68, as against 17.04 for the corresponding period of last year.

Hospital for Fordham College Opposed.—An application for permission to erect and operate a hospital in connection with Fordham Medical College has met with opposition because of the proximity of such an institution to the Fordham Hospital, which is a city institution. The advisability of granting the application is under the advisement of the commissioners.

Public Baths Menace Health.—The approval of the health department has been withheld in respect to five sites selected by the Commissioner of Public Works for public baths. A conference between these two city departments will be held for the purpose of discussing the subject, and if baths are permitted along the Hudson a more than usually close watch will be kept on them for gathering data on which to base future decisions as to the safety of such baths.

Pellagra Commission Starts South.—The Post-Graduate Hospital Commission for the study of pellagra under the direction of the Division of Tropical Medicine, left New York City on May 27 for Spartanburg, S. C. The personnel of the commission consists of Capt. Joseph F. Siler, Medical Corps, U. S. A.; Dr. Phillip E. Garrison, Passed Assistant Surgeon, U. S. N., and Dr. Ward J. McNeal, assistant director, Department of Laboratories of the New York Post-Graduate Medical School and Hospital. The expedition will study especially the causes of the disease, while curative methods will be studied in the hospital in this city at the same time.

Personal.—Dr. A. L. Wolbarst has returned from a brief trip to Paris, Frankfurt and London.——The summer home of Dr. P. Carr at Bayville, L. I., was destroyed by fire on May 19, the loss being estimated at $50,000.——Dr. Harriet W. Hale, superintendent of the Public Baths and Comfort Stations, in Brooklyn, has been appointed to represent New York at the International Conference on Public Baths to be held in Scheveningen, Holland, in August.——Among those who sailed for Europe, May 25, are Dr. John L. Adams, Dr. Emily Lewi, Dr. and Mrs. W. H. Davis, Dr. and Mrs. J. J. Asch and Dr. and Mrs. John H. Huddleston.——Dr. Winfield Scott Schley and Dr. and Mrs. Warren Coleman have sailed for Europe.

The Health Department and Infant Paralysis.—The health department has prepared a circular for physicians and the public asking cooperation in the campaign to stamp out infant paralysis. The department says that the disease has spread because of careless handling and insists on a minimum quarantine of four weeks, the exclusion of other children in the same family from school, and the disinfection of bedding and clothing by formaldehyd. The preparation of the serum has been transferred from the Rockefeller Institute to the board of health. The death-rate for infantile paralysis in 1911 in this city was 0.44 per 10,000 population, while in the epidemics of 1872 and 1905 the rates were 8.07 and 6.32, respectively.

Resuscitation After Electric Shock.—The Commission on Resuscitation After Electric Shock, organized on the initiative of the National Electric Light Association, and having for its purpose the study of electric shock and the preparation of rules for first aid in causes of electric accident, has the results of its work ready for presentation to the public. There is a simple chart to be posted in all factories and electric shops, and a more detailed set of rules embodied in a sixteen-page booklet to be carried in the pocket of the electrician. These represent the commission's findings on the question of producing artificial respiration in emergency cases. The commission will later publish a report on mechanical means of producing artificial respiration and the insufflation method advocated by Dr. Meltzer will also be passed on by the commission.

Antivivisectionists May Be Sued for Libel.—With their characteristic venom and disregard for facts, the Vivisection Investigation League has made itself responsible for the startling statement that Dr. Hideyo Noguchi of the Rockefeller Institute for Medical Research had inoculated 146 persons of pure blood with the poison of syphilis. The charges made were based on a paper written by Dr. Noguchi and published in the *Journal of Experimental Medicine*, December, 1911. Attorney Whitman and President Lindsay of the Society for the Prevention of Cruelty to Children have investigated the charges of the antivivisectionists, and their report characterizes these charges as "the most mendacious and malicious of slanders that has appeared in the long catalogue of misrepresentations for which the antivivisectionists are responsible." It has been reported that possibly several suits for libel against prominent members of the Vivisection Investigation League may grow out of the matter.

NORTH CAROLINA

Cornerstone Laid.—The cornerstone of the first permanent building of the North Carolina State Institution for the Feeble-Minded, Kinston, was laid with impressive ceremonies, May 8. Temporary quarters have been arranged and it is expected to open the institution in a short time, accepting about 35 per cent. of the 400 whose applications are on file for admission.

Sanatorium Progress.—Work is progressing rapidly on Dr. H. F. Long's new sanatorium, which is being built at Statesville. The building is expected to be ready for occupancy before the first of September.——Dr. Charles T. Harper has had plans made for an enlargement of the Wilmington Sanatorium, which will double the capacity of the institution so that it will accommodate thirty-five patients.——Dr. and Mrs. Claude L. Pridgen, Kinston, in charge of the free dispensaries for the treatment of hookworm disease, have opened a dispensary in the courthouse of Raleigh. Dispensaries have previously been opened at Apex, Wendell, Wake Forest and Fuquay Springs.

OHIO

Hospital Dedicated.—Dedicatory exercises of the New Samaritan Hospital, Ashland, were held May 28. The hospital

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plan and construction were described by the architect, Mr. Frank L. Packard, the presentation address was made by Hon. Peter S. Grosscup and the building was accepted by John C. Stupp. An address on "Purpose of the Hospital and Its Benefits to the Community," was made by Dr. William Niles Wishard, Indianapolis.

New Youngstown Hospitals.—The campaign for raising $100,000 for St. Elizabeth's Hospital, Youngstown, ended successfully April 24, and on April 30 a gratification meeting and banquet was held in the Auditorium.——At a meeting of the board of trustees of the Youngstown City Hospital, April 29, action was taken which will result in the building of extensive additions and which will increase the capacity of the institution by probably 100 beds. The proposed enlargement takes into consideration the utilization of the proceeds of the bequest of the late Miss Sally Tod for the erection of an isolation pavilion. The addition to the hospital is to be known as the "Tod Annex" and will cost about $75,000. To the east of this wing is to be erected a two-story operating pavilion.

PENNSYLVANIA

Contagious Hospital for Lehigh.—The commissioners of Lehigh County have planned a contagious hospital for the county, which will be modern and sanitary and have a capacity for twenty-five patients.

Pittsburgh Neurologic Society.—A number of physicians of Pittsburgh, who are interested in the study of nervous diseases, have organized the Pittsburgh Neurologic Society and plan to hold five meetings each year. The following officers have been elected: president, Dr. Samuel Ayres; secretary, Dr. E. E. Mayer.

Philadelphia

Jefferson Elects Two New Professors.—At the meeting of the trustees of Jefferson Medical College, May 30, Dr. William M. Sweet was elected clinical professor of ophthalmology and Dr. H. R. Loux, professor of genito-urinary surgery.

Women Physicians Appeal.—The Alumnæ Association of the Woman's Medical College has appealed to Mayor Blankenburg to aid in providing housing accommodations for women resident physicians at the Philadelphia General Hospital. Five graduates of the college passed the civil service examination for interns, one passing second, but all were refused because there was no adequate housing accommodation.

University Hospital Convalescent Home.—May 31 Mrs. George H. McFadden presented Hillsdale Farm, near West Chester, to the Social Service Department of the University Hospital as a home for convalescent women. The house has been remodeled and finished for the comfort of the patients and six women at a time will be transferred from the University Hospital to the farm to remain until fully recuperated.

Abington Hospital Managers Elected.—Although the work for the hospital at Abington on the Old York Road has only begun, two entertainments have been given which netted the institution more than $600. The hospital is to be known as the Abington General Hospital and the women who were instrumental in organizing the charity have formed a board of lady managers and elected officers and committees.

Women's Medical College Commencement.—The sixtieth annual commencement of the Women's Medical College was held Wednesday, May 29, at the Academy of Music. Dr. James J. Walsh, dean and professor of nervous diseases and of the history of medicine at Fordham University, delivered the address and Mary E. Mumford, president of the Board of Corporators, conferred the degrees on the thirty graduates.

Widener Home Endowed.—An endowment fund of $4,000,000 so arranged that it will ultimately reach $5,000,000, was permanently settled on the Widener Memorial School for Crippled Children, by its founder, Peter A. B. Widener, May 20. The laws of the state do not permit any charity to hold property producing an income of more than $30,000 a year, without special order of the court. The order of the court granting such permission to the Widener Home was signed May 20 by Judge Wiltbank.

Jewish Hospital Meeting.—The forty-seventh annual meeting of the Jewish Hospital Association was held May 26. The report of the president, William B. Hackenburg, showed that 6,613 patients had been treated by the hospital during the year, and that the cost per patient daily was $1.765. The report of the treasurer showed receipts of $126,971.53 and disbursements of $127,405.84. The hospital received $39,000 from the Federation of Jewish Charities and the investment account comprises $513,975.27.

Whooping-Cough and Typhoid Spread.—Whooping-cough in a virulent form is prevalent throughout the city, 123 new cases having been reported to the board of health for the week ending May 25. The sudden increase in the number of cases of typhoid has caused the bureau of health to make a special investigation of the Twenty-Second ward, in which seventeen new cases of the disease have occurred since May 17. Special attention will be given to the Pennsylvania Institution for the Deaf and Dumb, in which there are seventeen cases of the fever, seven having been reported during the present week.

Commencements.—Governor Phillips L. Goldsborough, of Maryland, will be the orator at the one hundred and fifty-sixth commencement exercises of the University of Pennsylvania at the Metropolitan Opera House, June 19.——The commencement exercises of the Medico-Chirurgical College were held in the Academy of Music, June 7, and Dr. Lewis S. McMurtry, professor of abdominal surgery in the University of Louisville, Kentucky, delivered the address. For a week prior to the graduating exercises, clinics were held daily for members of the American Medical Association on their way to Atlantic City.

Baby-Saving Show.—The Baby-Saving Show, held in Horticultural Hall from May 18 until May 26, has been largely attended. According to official figures made public May 24, more than 50,000 people had visited the exhibition up to that time and on that date 13,000 persons visited the show and more babies than before were checked, 450 having been put in charge of a Philadelphia General Hospital nurse supervising the rest-room nursery. On May 26 the show was moved to Third and Catherine Streets; from there it goes to the Boys' Club in Kensington; then to the factory district of Germantown.

Red Bank Sanitarium Opens.—The Philadelphia Sanitarium opens its summer work for children at Red Bank, six miles down the Delaware, June 8. The two river sanitarium boats, *Elizabeth Monroe Smith* and *John F. Smith*, will start their hourly trips to continue all summer. Last year they carried 104,465 passengers in sixty-five days. Tickets are distributed free to poor children and to their mothers. A resident physician and two nurses, the local medical staff, examine all who go to the grounds and those needing medical treatment remain as long as necessary. On the grounds, besides merry-go-rounds, swings, etc., there are two large concrete bathing pools, one for boys and one for girls.

Personal.—Dr. George W. Norris has been appointed visiting physician to the Pennsylvania Hospital to succeed Dr. James Tyson, resigned, and Dr. Arthur Newlin to succeed Dr. Arthur V. Meigs, deceased.——Dr. William H. F. Addison sailed for Europe, May 24.——Dr. David Reisman was the guest of honor of the Alumni Association of the Detroit Medical School, May 20.——Dr. John G. Clark was the guest of honor at a luncheon given by the Ohio Alumni Association of the University of Pennsylvania at Dayton, May 8.——Dr. Jacob P. Schaeffer, a graduate of the University of Pennsylvania Medical Department in 1907 and resident physician at the University Hospital following his graduation, has been appointed professor of anatomy at Yale Medical School.——Dr. David L. Edsall, formerly of the faculty of the Medical School of the University of Pennsylvania and until recently at Washington University, St. Louis, has been appointed professor of clinical medicine at Harvard University.——Dr. Joseph S. Neff, director of the department of health and charities, had the honorary degree of doctor of public health conferred on him by Jefferson Medical College at the annual commencement.——Dr. A. J. Downes is in the St. Joseph Hospital suffering from general convulsions, caused by a fall from a second story window, May 24.——Provost Edgar F Smith celebrated his fifty-sixth birthday, May 25.

TENNESSEE

Personal.—Dr. R. Q. Lillard, Lebanon, secretary of the State Board of Health, has been placed in charge of the relief work of the state in the flooded districts, cooperating with the army, municipal and county authorities.——Dr. Robert Patterson, Cumberland Gap, who was seriously ill, is reported to be convalescing.

Publicity Campaign.—The State Board of Health has sent letters to the various newspapers of the state asking for space in their columns for a strenuous canvass against the maladies that endanger the welfare of the community, and especially typhoid fever, dysentery, malaria, the mosquito and the house fly.

TEXAS

Memphis Hospital Alumni Held Banquet.—The Texas Alumni of Memphis Hospital Medical College held a banquet in Waco, May 8, and elected the following officers: president, Dr. R. J. Alexander, Waco; vice-presidents, Drs. J. M. O'Farrell, Richmond; T. P. Weaver, De Leon, and C. E. Davis, Linden; and secretary, Dr. C. H. Harris, Ft. Worth.

Laboratory Under Construction.—Work has commenced on the construction of the state laboratory for the manufacture of antitoxin and serums at Austin. Dr. Henry Hartman, state bacteriologist, states that the department will be obliged to work on a small scale at present, owing to the limited appropriation, but hopes that the next legislature will be sufficiently generous to place this department on a satisfactory working basis.

VIRGINIA

Changes in the University College of Medicine.—Dr. Jacob Michaux, one of the original members of the faculty, resigned the chair of obstetrics and was made professor emeritus of obstetrics. Dr. Paulus A. Irving, who has moved to Farmville, Va., was made emeritus professor of pediatrics. Dr. John F. Winn, formerly professor of clinical obstetrics, was elected professor of obstetrics, and Dr. Virginius Harrison associate professor of the same branch. Dr. Francis W. Upshur was chosen professor of materia medica and therapeutics, and Dr. C. Howard Lewis was made professor of pharmacology and also associate professor of physiology, these two physicians dividing the chair which was formerly held by Dr. Virginius Harrison. Dr. E. C. L. Miller was elected professor of bacteriology and physiologic chemistry.

GENERAL

Medal Awarded Harvard Chemist.—The second Willard Gibbs medal, founded by William A. Converse, Chicago, for distinction attained in chemistry, was awarded to Prof. Theodore W. Richards of Harvard University, by the Chicago section of the American Chemical Society, at a dinner held on May 17.

Connecticut Valley Physicians Hold Meeting.—The annual meeting of the Connecticut River Valley Medical Association was held in Bellows Falls, Vt., May 8, and the following officers were elected: president, Dr. A. L. Miner, Bellows Falls; vice-president, Dr. W. P. Craig, Walpole, N. H., and secretary-treasurer, Dr. J. S. Hill, Bellows Falls, Vt.

Tennessee Alumni Meet.—At the annual meeting of the Alumni Association of the Medical Department of the University of Tennessee, May 7, the following officers were elected: president, Dr. H. T. Brooks, Nashville; vice-presidents, Drs. Emil Withers, Memphis; M. D. Davis, Chattanooga, and G. H. Newton, Chicago; corresponding secretary, Dr. O. S. Swarr, Memphis; recording secretary, Dr. W. M. Moses, Uvalda, Ga., and treasurer, Dr. G. Gartly, Memphis.

Virginia and District Physicians Meet.—At the annual meeting of the Medical Society of Northern Virginia and the District of Columbia held in Leesburg, Va., May 15, the following officers were elected: president, Dr. Philip S. Roy, Washington, D. C.; vice-presidents, Drs. M. G. Douglas, Warrenton, Va., and John A. Gibson, Leesburg, Va.; recording secretary, Dr. Arthur G. Coumbe, Vienna, Va.; corresponding secretary, Dr. J. D. Rogers, Washington, D. C., and treasurer, Dr. W. I. Robey, Herndon, Va. The next meeting will be held in Washington, D. C., November 20.

American Pediatric Society Elects Officers.—At the annual meeting of this society, held in Hot Springs, Va., May 29-31, the following officers were elected: president, Dr. John Lovett Morse, Boston; vice-president, Dr. John Ruhräh, Baltimore; secretary, Dr. Samuel S. Adams, Washington, D. C.; treasurer, Dr. Charles Hunter Dunn, Boston; recorder and editor, Dr. L. E. LaFétra, New York; member of council, Dr. Thomas Morgan Rotch, Boston; representative of the society on the committee on arrangements for the meeting of the congress in 1913, Dr. Samuel S. Adams, Washington. Place of meeting Washington, D. C.

FOREIGN

Deaths Abroad.—F. Zachrisson, M.D., privat-docent of surgery at the university of Upsala and long editor of the *Upsala Läkareförenings Förhandlingar*, died recently of leukemia, aged 43. The first symptoms had been noticed in 1910, but great improvement for over a year followed a course of Roentgen-ray exposures. Then the symptoms returned and proved fatal in seven months. Zachrisson's scientific works include a number published in Sweden and Germany on general and spinal anesthesia, tuberculin reactions, acute anemia, etc.——H. Ström, professor of surgery at the University of Christiania, for twenty years an authority on cholelithiasis, died finally of that disease.

A New Journal for Chemotherapy.—Few branches of medicine have experienced a development as sudden, intensive and effective as the new domain of chemotherapy associated so closely with the name and efforts of Paul Ehrlich. With mushroom-like growth, new principles in therapy and new procedures in diagnosis have arisen, commanding attention in every land where modern scientific medicine exerts its beneficent influence. The literature which the new work and its exploitation has inspired in a period counted better by months than years, now reaches enormous proportions. This has led to the establishment of a new journal intended for laboratory investigator and practitioner alike. With the title of *Zeitschrift für Chemotherapie und verwandte Gebiete* (Verlag von Georg Thieme, Leipsic), the new publication is edited under the supervision of P. Ehrlich, F. Kraus and A. v. Wassermann—names which themselves serve to give it an immediate prestige in the field of immunotherapy and diagnosis. It is planned to publish original articles at indefinite intervals, while the review feature, forming a continuation of the *Folia Serologica*, will appear regularly. The first number of 200 pages is devoted to salvarsan (606) therapy, and includes elaborate reports from Germany, Great Britain, France, Italy, Russia and the United States. The American review is by Dr. John A. Fordyce of New York.

CANADA

Canadian Medical Association.—The forty-fifth annual meeting of the Canadian Medical Association will be held at Edmonton, Alta., August 10 to 14. The first day, Saturday, will be devoted to business. The scientific program will begin on Monday. At the conclusion of the meeting there will be excursions to the famous Yellow Head Pass and to Calgary. While it was at first thought that one day of the meeting should be spent in Calgary, that idea has been since abandoned. A visit to Calgary may precede or follow the meeting in Edmonton. Everything goes to show that a splendid program of papers will be ready and the proverbial hospitality of the West is already shown in the numerous arrangements already made for the amusement and the comfort of the visitors. Railway rates will be single fare plus 25 cents for the return trip on the standard convention certificate plan from all points in Canda. Summer tourist rates will be in effect for a trip to the coast and for return by one of the United States routes.

LONDON LETTER

(From Our Regular Correspondent)

LONDON, May 18, 1912.

The Woman Physician in India

As in Japan and China, no factor has been more powerful in India in impressing on the native mind the value of western culture than the benefits to be derived from European medicine. None has done so much to reconcile the people to British rule, which, whatever its defects, must receive great credit for extending freely to the natives the benefits of European medicine. For more than fifty years a State Medical Service has given medical relief for the necessitous poor. Hospitals and dispensaries have been provided all over the country. There are nearly 3,000 medical centers under the direction of the physicians of the Indian Army. These hospitals are, of course, at the service of women, but in consequence of native customs only the lowest class of women take advantage of them. The high-caste purdah, or veiled woman, would rather face death than do so and all Indian women, whatever their caste, instinctively shrink from men physicians. The missionaries recognized the need for women physicians and in 1885 Lady Dufferin, the wife of the viceroy, opened a hospital at Delhi for women and children, which was started by the Society for the Propagation of the Gospel. It would be difficult to exaggerate the importance of the work done by this hospital. From a very small beginning it has become a magnificent modern hospital with three resident women physicians and a large staff of native nurses under the English ward sisters. Under the auspices of the missionary societies there are hospitals in different parts of India officered by women physicians, who now number over 200. Their sphere is limited to the lower caste natives. About twenty-five years ago Lady Dufferin initiated a charitable organization to provide medical aid for the purdah or high-caste woman. Under it excellent work has been done. Native and Eurasian women have been trained in medical work at the medical schools. But it was

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found impossible to reserve the Dufferin hospitals for purdah women entirely. One reason was that a sufficient number of women physicians could not be obtained; men had to be introduced. A high-caste woman will not go to a hospital if a man is allowed to enter the wards as inspector or surgeon and many of these women, notwithstanding their caste, are too poor to pay for medical attendance outside. It is felt that the only remedy for the inadequate conditions of medical work among Indian women will be the establishment of women's medical service under the government, managed entirely by women physicians.

Effect of the National Insurance Act on the British Medical Association

The effect of the national insurance act in welding together the previously disunited medical profession (which many believed was impossible to unite), and in causing an unprecedented accession to the ranks of the British Medical Association has been referred to in previous letters to THE JOURNAL. According to the annual report of the council, the membership of the association rose, during 1911, from 22,448 to 25,301, an increase of 2,853 as compared with 1,043 in 1910. In respect to finance, a considerable increase has occurred in expenditure. In organizing to resist the insurance act, $40,000 has been spent, which brings the total expenditure for 1911 up to $337,000. A national insurance defense fund was subscribed by the profession and amounted to $32,000, but for which there would have been a deficit of about this amount in the funds for the year.

Memorial to the Late Lord Lister

Steps have been taken by the Royal Society in association with the Royal College of Surgeons to form a committee which will issue an appeal to form a memorial to the late Lord Lister.

Change in the Treatment of Rabies at the Indian Pasteur Institutes

At a meeting of the central committee of the Association of the Pasteur Institute of Southern India, Surg.-Gen. W. B. Bannerman of the Indian Medical Service stated that at a conference of medical officers held to consider the treatment of rabies in India, the possibility of using brain substance, sterilized by heat or chemicals, was discussed. Some experiments made by Sir David Semple and published by the government seemed to hold out hopes in this direction. The conference therefore had experiments carried out at some of its laboratories and as a result the rabies virus killed by phenol (carbolic acid) is now used. The virus is obtained in the usual way from the brains and medullas of rabbits which have died from the exalted virus called by Pasteur "fixed virus," and used by Pasteur institutes throughout the world. Pasteur advised the use of virus attenuated by drying for a certain number of days, and this was the method first used in India. As the number of patients increased it was found impossible to continue this method owing to the large number of rabbits required and the labor involved in preparing the virus. Then a method devised by the late Dr. Högyes, director of the large Pasteur Institute at Budapest, was used and proved to be as safe as the original method.

The method now used is a modification of that devised by Högyes. Whereas he used fresh brain or medulla made into an emulsion with sterilized saline solution, the same emulsion is now used but acted on by phenol and kept at blood-heat for twenty-four hours. It has the advantage that it can be kept for some days without deterioration or danger of contamination. It is hoped that it may be possible to send out this phenolized virus to selected centers where patients can be treated.

PARIS LETTER

(From Our Regular Correspondent)

PARIS, May 17, 1912.

The Transfusion of Blood

Drs. Guillot and Dehelly, of Havre, presented before the Société de Chirurgie, at one of its last meetings, two reports on cases of obstinate hemorrhage, due in one case to a uterine fibroma, in the other to gastric cancer. Transfusion stopped the hemorrhages in both cases, and in the first, hysterectomy effected a cure. In the second, the patient was able to endure a gastro-enterostomy, but she died a few days later from the cancer.

Dr. Delbet, professor of clinical surgery in the Faculté de médecine de Paris, who had charge of the report, remarked that, in these two cases, the seat of the hemorrhage was inaccessible and that it might be questioned whether the persistence of oozing blood was not due to the condition of the walls and to lesions of the surrounding tissues. Transfusion, then, would act primarily as a hemostatic. Apart from this function, it can be questioned whether this method has any advantages in profuse hemorrhages and whether it is preferable to intravenous injections of physiologic salt solutions. Experiments on animals show that, in profuse hemorrhages, when the arteries are empty, the veins are still engorged with blood; an injection of a physiologic solution of sodium chlorid restores the circulation of this stagnant blood in exsanguinated and apparently dead animals. It is unnecessary to resort to a method as complex as the transfusion of blood. The saline injection is preferable in shock, in which the transfusion may become even dangerous in causing hemorrhages if the patient has not already lost blood. The results obtained from transfusion in toxemia, cancer, leukemia and pernicious anemia are equally unfavorable. Transfusion can be used advantageously in carbon-dioxid poisoning, provided, however, that operation begins before the heart has stopped beating.

Dr. Tuffier, *agrégé* professor in the Faculté de médecine de Paris, on the basis of several cases of direct transfusion of blood done in his service (the first of these attempts was made by Dr. Carrel), thinks that the method presents considerable difficulty: there are precautions to take before the transfusion (examination of the blood-serum of the receptor and of the donor), but these take time, which is not always available; it is necessary to strip the artery for a considerable length and, if necessary, to dissect it free, tying off collaterals, for it is very difficult to operate in the space which separates the forearms of the two subjects; on the other hand, it is rather difficult to determine the quantity of blood given by the donor, for there is no way of measuring flow in a given space of time. Tuffier believes, moreover, that the observations published up to date should be submitted to a very severe criticism. American surgeons, who have made many transfusions, have employed this method in a wide range of different cases; Tuffier considers that the indications for its use are, on the contrary, very limited and that injections of physiologic sodium chlorid should be used whenever they are sufficient.

The Impunity of a Charlatan

For several months, a certain Macaura, who pompously styles himself "Dr. Gerald J. Macaura, M.D., F.R.S.A., ancien membre de la Commission royale d'hygiène à Londres," has been attracting a large number of patients by advertisements in all the daily papers exploiting his apparatus called "Pulsoconn," which is said to cure not only rheumatism, gout, sciatic neuralgia, but also locomotor ataxia, paralysis and deafness! In short, "in ninety-nine cases out of a hundred, cure is certain . . . no sick person, however serious his disease, can afford to dispense with Pulsoconn." [For a somewhat detailed exposé of this faker see the editorial "Macaura Comes Back," THE JOURNAL A. M. A., Aug. 5, 1911, p. 485.—ED.]

Personal

On May 14, the Académie de médecine elected Dr. Jalaguier, *agrégé* professor of the Faculté de médecine de Paris and surgeon of the hospitals, as a member in the section of surgical pathology in place of the late Professor Lannelongue. Dr. Jalaguier is at present surgeon of the hôpital des Enfants-Assistés. His works are principally on infantile surgical pathology and several successful innovations in this domain are due to him, especially operations for hare-lip, club-foot and coxalgia, and an antiseptic operation for repairing the alæ nasi.

BERLIN LETTER

(From Our Regular Correspondent)

BERLIN, May 10, 1912.

Personal

Professor von Bauer, director of the first medical clinic at Munich, died May 9 at the age of 66. He published a large number of articles on physiology and therapeutics, particularly in the field of deranged metabolism and diseases of the blood vessels. He was a son-in-law of the noted clinician v. Ziemssen of Munich.

Housing Conditions in Berlin

The Berlin local Krankenkasse for merchants' employees has just published the eleventh report (1911) on housing conditions of its members. The homes of 12,975 members of the Kasse, who were incapacitated by sickness were investigated; of these, 6,457 lived in buildings fronting on the street; 6,518 in the rear; 779 lived in rooms in which the floor space amounted only at the most to 10 square meters, which was,

however, decreased by the necessary furniture; 43 of them moreover had no windows; 2,694 patients were found in rooms of which the height did not correspond to the minimum height, 2.8 meters (9 feet), which is required by the Berlin building code. The amount of air space of which at least 20 cubic meters are required for a healthy person was below this standard in the case of 5,421 patients; in 1,421 cases it did not amount to 10 cubic meters, and for 158 patients it was not even five. In one dwelling room and a kitchen the patient lived together with three persons in 765 cases; with four persons in 420; with five in 178; with six in 83, and with seven and over in 62 instances. The sleeping room was shared with three persons of the same family by 1,576 patients; with four by 624; with five by 263; with six by 103, and with seven and over by 66; 1,100 patients had to share their bed with others. In this group 116 were pulmonary invalids, in which case the danger of infection is much the greater. Of the 1,407 pulmonary invalids only 266 slept in a room by themselves. The conditions are better for patients renting furnished sleeping rooms. More than half of all the pulmonary invalids of this class had a room for themselves day and night. Forty-nine pulmonary patients on the other hand lived in a room without any heating facilities; altogether 328 patients were found in the same pitiable situation; 626 patients were found in rooms heated only with the cooking stove; 165 patients were found in damp rooms. Although in general a slight improvement in the housing conditions can be shown as compared with the previous year, notwithstanding the unfavorable showing of the statistics, yet even this cannot be said with regard to the water-closet conditions. Half of the patients have to leave their apartments to use the closet, and the number of those using the same closet is also disproportionately high. A further interesting finding is that something over one-third of all the patients were born in Berlin; among these the relative frequency of diseases of the lungs exceeds that among those who have come to the city to live.

VIENNA LETTER

(From Our Regular Correspondent)

VIENNA, May 10, 1912.

A Collection of Reconstructions of Skulls of Celebrated Persons

At one of the last meetings of the Vienna Medical Society, Professor Tandler, the anatomist, explained his idea of establishing a collection of reconstructions of skulls of eminent persons. He had worked out a method based on experiments to be described hereafter, which enabled him to obtain a perfect reconstruction of the skull and the brain of living persons. His work is based on *x*-ray photographs. By this means he got a stereoscopic picture of a head of a baby, 2 months old, and had it reconstructed in wax. The reconstructed head and the natural head corresponded and by protracted studies he was enabled to find out the exact relationship between the soft tissues and the bones of the skull. But this method permits also of reconstruction of the contents of the skull, the brain. The method was worked at for seven years, until at present one may say the method is perfect. Professor Tandler could thus have the skull of Beethoven and of Haydn, the famous musicians, reconstructed after their death-masks. In the course of studies the heads of persons belonging to different races and nations were worked at and the result is so far uniform that the constant relationship between bone and soft tissue has manifested itself here also. Professor Tandler asks the cooperation of his confrères in obtaining the necessary funds and cooperation for the difficult and expensive work. The collection of models of skulls and brains would be the more useful, as only in rare instances is the skull or brain of an eminently gifted person scientifically examined. The relation of certain conditions to skull and brain formation could be ascertained in due time by such studies, which can now be conducted during the life-time of the person to be examined.

Investigation Into Infant Mortality in Vienna

In a paper read before the annual meeting of the Austrian Society for Protection of Children and the Care of Youth, Dr. Moll pointed out the remarkable fact, that, especially in those districts which are inhabited by the wealthier classes, infant mortality has gone up considerably within the last few years. This startling statement, proved by official figures, set in motion an investigation by the Vienna board of health *(Stadtphysikat)*. All medical officers of public health in Vienna have been requested by the board of health to answer the following questions: 1. Is the increased infant mortality confined to certain classes or occupations, and if so, which are these? 2. Are certain streets known in which infant mortality is especially high? 3. Is the outdoor occupation of women increasing, and does this occasion neglect of the duties of mothers which accounts for the above-mentioned conditions? 4. Is medical aid less frequently sought than it was formerly? 5. Is there any noticeable connection between conditions of housing and infant mortality? 6. What are the conditions and frequency of boarding out of infants? 7. Is there any decrease of suckling observed among mothers? 8. How can conditions promoting infant mortality be best combated? Dr. Moll's statement has caused wide-spread consternation among the sanitary authorities, although the lecturer himself has emphasized the necessity of using statistical data with utmost caution. Especially the great fluctuation of the population, which here is chiefly centrifugal, must be kept in mind; for in several hitherto wealthy districts the quality of the population has changed greatly by the emigration of the wealthy families into garden suburbs. But there is no doubt that the majority of the population has changed its own food and that of its babies, and the change has been for the worse. Also lodgings have become less healthful of late, for with the increasing rents the rooms have become smaller, the system of subletting has grown and more people live now in the same space than ten years ago. The fall in the number of births is a constant fact, to be seen in all civilized countries. And, as Dr. Bohm states, if economic conditions prevent people from producing children, all care must be taken to enable them to rear healthfully such children as they do produce. Therefore, the Austrian Society for the Protection of Children, founded to celebrate the emperor's jubilee, has interested itself in the subject, and the results of its scientific endeavors will be awaited by all medical men with great interest.

Marriages

SAMUEL C. HALLEY, M.D., Fort Collins, Colo., to Miss Frances G. Hopkins, Grainfield, Kan., at Grainfield, May 21.

WILLIAM F. DEY, M.D., to Mrs. Marion B. Perry, both of LaGrange, Ill., at Kenosha, Wis., May 23.

CARL J. HOFFMAN, M.D., Woodland, Wash., to Miss Ethel M. Guerding, at Astoria, Wash., May 16.

GLENMORE FORD CLARK, M.D., U. S. Navy, to Miss Josephine Gould, at Philadelphia, May 21.

J. H. HART, M.D., McDaniels, Ky., to Miss Pearl May, Webster, Ky., at Webster, May 17.

DONALD MACDUFFIE, M.D., Olean, N. Y., to Miss Beatrice Diamond, at Albany, May 22.

J. A. TOOLE, M.D., to Mrs. M. L. Zealy, both of Birmingham, Ala., at Fairview, May 16.

ELLIS KIRK KERR, M.D., to Miss Dorothy Charlton, at Oak Park, Ill., May 25.

M. S. MARCY, M.D., to Miss Leora Cullom, both of Peoria, Ill., May 21.

Deaths

Alden B. Farnham, M.D. Bellevue Hospital Medical College, New York, 1875; of Citronelle, Ala.; a one-time member of the staff of the Charity and Maternity hospitals; assistant surgeon in the Eye and Ear Infirmary in New York; health officer of New Rochelle from 1880 to 1883; a resident of Milwaukee, Wis., for five years, during which time he was trustee, secretary and treasurer of the Milwaukee Emergency Hospital, president of the Milwaukee Medical Society and secretary of the Bartlett Clinical Club; died at his home, May 6, aged 68.

Edwin Clarence Howard, M.D. Harvard Medical College, Boston, 1869; a well-known colored physician of Philadelphia; one of the original members of the Douglas Hospital staff, and one of the founders of the Mercy Hospital; a member of the Philadelphia County Medical Society; died after a long illness at his home in Philadelphia, May 10, aged 66.

Frank E. Palmer, M.D. Cleveland University of Medicine and Surgery, 1877; of Albion, Mich.; former mayor of that city; president of the Commercial Savings Bank, which position he held at the time of his death; died at his home, May 9, from Bright's disease, aged 64.

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Edward A. Donelan, M.D. Medical College of Ohio, University of Cincinnati, 1852; of St. Joseph, Mo.; a member of the legislature from Andrew County in 1851-1852, and from Buchanan County for five terms; a member of the board of managers of the State Hospital at Fulton for one term; served as county physician for two terms, after which he was appointed city physician; one of the founders of the College of Physicians and Surgeons in St. Joseph; died at the home of his niece, May 10, from cerebral hemorrhage, aged 88.

Richard L. Sykes, M.D. New York University Medical College, 1866; of Columbus, Miss.; at one time a member of the medical staff of Blackwell Island, and of the surgical corps; died at his home, May 6, shortly after an operation, aged 72.

Chester Rowell, M.D. Cooper Medical College, San Francisco, 1870; of Fresno, Cal.; a member of the Medical Society of the State of California; chief owner and former editor of the Fresno *Republican;* died at Los Angeles, May 23; aged 68.

James T. Burdick, M.D. Worcester Medical College, Mass., 1853; for nearly fifty years a practitioner of Brooklyn; a surgeon in the 147th New York Volunteers during the Civil War; died at his home in Brooklyn, May 19, aged 80.

Edgar Reed Hawley, M.D. College of Physicians and Surgeons, Chicago, 1892; medical director of the Illinois Life Insurance Company for twelve years; died in the Chicago Hospital, May 26, from pneumonia, aged 48.

James A. Mannon, M.D. College of Physicians and Surgeons, Chicago, 1894; of Sherrard, Ill.; for eighteen years the leading physician of Sherrard; died suddenly at Excelsior Springs, Mo., May 12, of heart trouble, aged 64.

Charles Andrew Kessinger, M.D. Medical College of Ohio, University of Cincinnati, 1876; of Martinsville, Ind.; for four years surgeon at the Ohio penitentiary, at Columbus; died at his home, from paralysis, aged 58.

S. O. Anthony (license, Louisiana, 1903); of Pineville, La.; a member of the Louisiana State Medical Society; a prominent physician of Alexandria; was run over and killed by a log train near Pineville, May 20.

John W. Johnston, M.D. Albany Medical College, 1866; for forty-eight years a practitioner of Blair county; president of the First National Bank of Claysburg, Pa.; died in that city, May 8, aged 69.

William Bennett Pierson, M.D. College of Physicians and Surgeons, New York, 1852; of Brooklyn, N. Y.; died suddenly at his summer home, at Huntington, L. I., May 10, aged 86.

Moses Chess, Jr., M.D. Western Pennsylvania Medical College, Pittsburgh, 1899; of Tucson, Ariz.; died at his home, May 14, from pulmonary tuberculosis, aged 35.

LeRoy S. Groves, M.D. Medical College of Ohio, University of Cincinnati, 1859; died at his home in Creston, Iowa, May 5, from old age and organic diseases, aged 80.

John W. Coverston (license, Ind., 1897), of Franklin, Ind.; died at the home of his daughter, in Waupaca, Wis., May 17, from cerebral hemorrhage, aged 72.

Hubert Townsend Foote, M.D. Eclectic Medical College of the City of New York, 1881; died at the Park Avenue Hotel, New York City, May 18, aged 53.

James Faithful Aris, M.D. University of Michigan, Ann Arbor, 1866; for forty years a practitioner of Toledo, Ohio; died at his home, May 9, aged 67.

Arthur A. Roberts, M.D. Pulte Medical College, 1897; died at his home in Wellsburg, W. Va., May 17, from enlargement of the heart, aged 38.

Luther Clarke Cox, M.D. Yale University, Medical Department, 1856; of San Francisco; died at his home, May 10, from pyonephritis, aged 76.

James Gilmore Thompson, M.D. Hahnemann Medical College, Philadelphia, 1872; died at his home in New Brighton, Pa., May 17, aged 52.

Ephraim Hopkins, M.D. University of Maryland, School of Medicine, Baltimore, 1859; died at his home in Darlington, Md., aged 75.

William M. Hightower (license, Arkansas, 1903); died at his home in Grapevine, Ark., April 27, from senile debility, aged 79.

Hiram LeRoy Fuller, M.D. McGill University, Montreal, 1870; died at his home in Sweetsburg, Que., recently, aged 72.

George W. Lyle, M.D. Eclectic Medical Institute, Cincinnati, 1860; died at his home in Scio, Ohio, April 20.

Henry M. Marvin, M.D. Rush Medical College, 1870; of Coloma, Mich.; died May 3, aged 80.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

SOME MISCELLANEOUS FRAUDS

HYOMEI

Hyomei is "guaranteed to cure catarrh, coughs, asthma, colds, croup and sore throat." It is also said to cure "all

Fig. 1.—Photographic reproduction (reduced) of one of the stock advertisements of Hyomei.

breathing troubles including early consumption." Hyomei is an oily liquid, a few drops of which are applied to a piece of gauze and the gauze placed in a hard rubber "inhaler" which is sold with the nostrum. To "cure" diseases of the nasal cavity one end of the inhaler is applied to the nostril; to "cure" diseases of the throat and lungs the other end of the inhaler is placed in the mouth. The chemists of the British Medical Association analyzed this humbug and reported that it had essentially the following composition:

Oil of eucalyptus	80 per cent.
Alcohol	10 per cent.
Liquid paraffin	10 per cent.

There was also a trace, apparently, of creosote in the mixture. Of course, this mixture never cured anything, unless it was impecuniosity in its exploiter.

ASCATCO

Ascatco is sold as an asthma cure. The company selling it used to go under the name of the Austrian Laboratory, New York City, and the stuff itself was sold as an Austrian product. It is not an Austrian product. It used to be advertised by means of advertisements that were made to imitate cable news and telegraphic reports. The cablegrams were, of course, sheer fakes. The company now is known as the Ascatco Laboratory and the advertising matter carefully omits the previous claims of Ascatco being an Austrian product. Its composition seems to be changing. When analyzed by the chemists employed by *Collier's,* it was found to be "a strong solution of arsenious oxid." An analysis by the Kansas state chemists practically confirmed the earlier findings. In a bulletin issued by the United States Department of Agriculture entitled "Habit-Forming Agents," Ascatco is described as an "opium-arsenic preparation." A cursory examination made in the Association's laboratory, disclosed the fact that the stuff contained benzoic acid apparently in combination with potassium; this, of course, in addition to the opium it contained. Ascatco also contains 13 per cent. of alcohol. The amount of opium in this "Austrian prescription" is gradually diminishing. Two or three years ago the labels declared the presence of 3.42 grains of opium to

Fig. 2.—One of the later labels around a package of Ascatco.

the ounce, later the presence of but two grains to the ounce was admitted while some of the specimens recently purchased give a still smaller opium content. The claims made for Ascateo that it "is non-injurious to the system," that it "leaves no after ill-effects," and further, that it "acts only on the respiratory organs," are three clear cut and unequivocal falsehoods. In fact, Ascateo is one of the most impudent frauds of its class.

ADLERIKA

Adlerika is an "appendicitis cure" sold by the Adlerika Company of St. Paul, Minn. It is sold, apparently, not as a mail-order proposition, but through such druggists as are not above entering into this sort of a scheme to defraud their customers. The company in a leaflet that it sends around to druggists frankly admits that it is not the people who *have* appendicitis that may be expected to buy of this worthless and potentially dangerous fraud, but those who *think* they have it. To quote:

"You have nothing on your shelf to take the place of Dr. Adler's Treatment and can sell nothing to the man who has appendicitis, nor to the vast multitude who THINK they have or are going to have this dreaded disease."

"Fully 75 per cent. of all cough and kidney remedies are bought by people who THINK they have consumption or some serious kidney ailment . . . and not by people who actually have them."

"The sale for it [Adlerika] is as unlimited as the sale for cough and kidney medicines."

Analyzed by the state chemists of North Dakota, Adlerika was reported to contain:

Epsom salts	large amount.
Aloes	large amount.
Salicylic acid	considerable.
Alcohol	trace.

Fig. 3.—Adlerika is sold through the instrumentality of local druggists. Circulars are sent around to druggists in country towns telling of the profits that can be made by selling Adlerika to the victims of appendicitis and, more important yet, "to the vast multitude who THINK they have or are going to have this dread disease." Here we reproduce the front page of one of the folders sent to druggists who are offered a chance "to get in on the ground floor."

Of course, a purging preparation, such as this, not only will not cure appendicitis, but may in some cases kill the patient suffering from that disease.

SARGOL

Next to the widely-advertised nostrums on the market for the cure of obesity, there are probably no bigger humbugs extant than the preparations sold as "flesh builders." Some of the latter class of fakes are alleged to be local in their action—to build up the bust but to have no effect on the rest of the body. Still others, of which Sargol is one, are sold as general "flesh builders." Sargol, which if we believe the advertisements, "makes puny, peevish people plump and popular," is sold by the Sargol Co., of Binghamton, N. Y., a concern which is said to be owned by Wylie B. Jones, an advertising man, and Oliver C. Kingsley. The stuff is advertised on both sides of the Atlantic and was recently analyzed by the chemists of the British Medical Association who reported that they found the Sargol tablets "to contain lecithin, hypophosphites of calcium, sodium and potassium, zinc phosphid, sugar, albumin and insoluble protein with talc, kaolin or some mineral matter, evidently added as an excipient." The amounts actually reported found were:

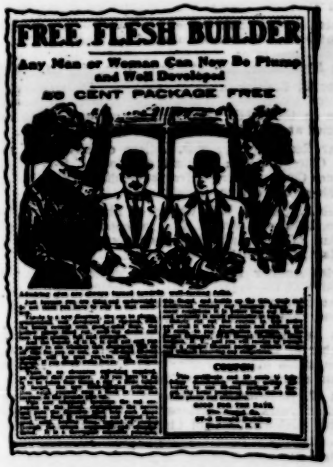

Fig. 4.—This is an advertisement of Sargol which its venders claim "makes puny, peevish people plump and popular." Apparently the advertisement is intended to convey the idea that if a woman has to hang onto a strap in a street-car because all the seats are filled with men, she will derive great satisfaction from an otherwise uncomfortable position if she has previously taken Sargol and thus become "plump and popular."

Sugar	18.0 per cent.
Insoluble protein (coagulated albumin?)	10.8 per cent.
Sodium and potassium hypophosphites	7.7 per cent.
Albumin (soluble)	4.2 per cent.
Lecithin	1.9 per cent.
Zinc phosphid	0.7 per cent.
Talc, kaolin, moisture, etc.	

The British chemists estimated that the cost of the materials for thirty of these worthless tablets was about 2½ cents; they are sold for $1.00.

The Fate of Medical Case-Books.—The possible fate of old case-books after their owner's death is, indeed, too seldom borne in mind by medical men. The hard-worked general practitioner, it is true, often has time for little more than a brief record even of unusual cases, but many consultants keep full notes of every private patient, and the disposal of such elaborate case-histories should not be left to the whim of an executor. The death of a popular physician, whose practice has for many years brought him into close touch with the secrets and the troubles of well-known people, may place in lay hands a shelf full of case-books of the greatest interest and scientific value, which, if allowed to drift about, might cause infinite pain. In such instances clear directions for the destruction or the sealing-up for a number of years of all professional documents would relieve executors of an embarrassing responsibility.—*Lancet*, London.

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Correspondence

VIENNA

VIENNA, April 16, 1912.

To the Editor:—Vienna always impresses the returning American as something fixed and unchanging. Men may come and go, but the old landmarks rarely alter. I saw the other day a picture of the Allgemeines Krankenhaus made in 1790, from one of the north windows of what is now the laboratory of the Fuchs eye clinic. This view is little different from what it is to-day. Every building in the first *Hof* is the same as now, even to the arrangement of minor details, such as windows and chimneys. Outside the Krankenhaus, however, the green fields of 1790 are now built up solid. But Chicago in much less than this time has changed from an Indian hunting-ground to a city one-fifth larger than the Vienna of to-day.

Osler, coming back here in 1908, after an absence of thirty years, found the hospital no different, the Alser Strasse the same old dusty highway where he had his residence, and, walking up Schlösselgasse, he took dinner in his former place at the Riedhof. The waiters, however, were different.

Frank Billings, coming back in 1899, twenty-five years after student days, could locate for us all his old haunts; but in the pathologic laboratory where he worked only the oldest *Diener*, the famous Theodore, was there to greet him back.

After a mere three years' absence I see sfight changes. The old barracks for the Hungarian Regiment at the foot of the Alser Strasse and opposite the Landesgericht are now being torn down to be replaced by the new home of the Austro-Hungarian bank. This land has become too valuable because of its central location longer to house soldiers.

The three new clinics, those of von Noorden, Pirquet and Chiari, which were well under way in 1909, are now occupied. There was no fuss and red tape about moving into them, such as kept the two gynecologic clinics unoccupied for nearly two years after they were completed. These new clinics are all built and equipped on the same munificent scale as the gynecologic clinics, and fulfil nobly our hospital ideas of to-day. One wonders whether, after another century has passed, they will look as antiquated to our posterity as the old hospital of 1790 does to us now.

Wagner's neurologic clinic has been moved into the old Irrenhaus quarters on the new hospital grounds, where he now has beds for 300 patients. The space in the old hospital made vacant by moving out these six clinics has already been taken up by the overflow from the other clinics, or has been turned into laboratories, operating-rooms, and the like. Von Noorden's old wards in the eighth *Hof* have been turned into a fourth medical clinic for Chvostek. His appointment strengthens the neurologic faculty, which was weakened when Strümpell deserted Vienna for Leipsic. The faculty in internal medicine is now very strong, with von Noorden, Neusser, Ortner, Chvostek, Kovacs, Wagner, Schlesinger, Pal and Frisch. These men combined have over a thousand beds for internal medicine and neurology under the roof of the one hospital. The dead of the hospital, without exception, go to the autopsy tables at Weichselbaum's institute. These clinics are all open to Americans, who may work there as externs or take the courses offered. The same opportunities that were taken advantage of by Billings, Osler, Kelly, Preble, Sippy, Spiller and many others of our leaders are still there, and in an even larger measure than in the past, owing to the recent increase in material.

Neusser, since his operation by Hochenegg last autumn, has been recuperating at his country home. It is not known when he will return to his clinic. Kovacs has been giving the student examinations for him, and his former assistant, Tuerk, is to lecture for him during the present summer semester. The absence of Neusser makes a noticeable gap here in internal medicine, because his clinic was much frequented by Americans for the sake of his famous talks on differential diagnosis. Kovacs is, in consequence, more popular than ever. He is still making the same hair-raising diagnoses that cause the American students to regard him as the eighth wonder. A recent one verified by autopsy was "obliteration of the left side of the pericardium (concretio partialis) and inflammatory effusion on the right side," a part of a very complicated picture, including also bilateral pleurisy with effusion, chronic peritonitis and miliary tuberculosis of the kidneys. One usually has to wait six to nine months at present before one's turn comes to get a place in Kovacs' course.

Clairmont is giving no more courses in surgery. He is too busy with private work and research. Haberer, Eiselsberg's second assistant, has been called to Innsbruck to take Schloffer's old clinic. Many think Clairmont should have had the preference.

Rudolph Schmidt, best known to Americans as Neusser's former assistant, and for his monographs on "Pain Phenomena" and "Abdominal Tumors," has also gone to Innsbruck to take the clinic left vacant by Ortner on coming to Vienna.

Hans Lorenz, formerly with Hochenegg, now has a small clinic of his own at one of the outlying hospitals in Vienna, where all Americans receive a cordial welcome.

The surgical department has not yet been favored with a clinic on the new hospital grounds; but Eiselsberg has been promised that the next building which goes up there shall be his. When the necessary funds will be available it is at present difficult to say.

Urbantschitsch's ear clinic has been moved into the eighth *Hof*, where it occupies some of the place made vacant by the gynecologic clinics. He has now about sixty beds. His material is so abundant that one can see one to three new cases of intracranial complications daily. Barany is no longer on active duty at the clinic. He is pursuing his nystagmus investigations, however, with the same relentless persistency as formerly. He seems to have proved, as has long been suspected, that the cerebellar hemispheres control the movements of the homolateral halves of the body. He has also been able to localize an arm and a leg center in the cerebellar hemispheres, and in a number of cases has been able to differentiate lesions of the hemispheres from those of the vermis.

There is a good deal of brain surgery being done here at present, especially at the Eiselsberg clinic; but the results so far have been rather disappointing. Eiselsberg, in his first hundred cases of brain tumor, recently reported, has had only four complete and permanent cures. One sees nearly every week at the autopsy table two or three cases of brain tumor or abscess, some operated on and many not. Hirsch has been having remarkable success with his hypophysis cases, twenty-five cases to date and only three deaths—none of them from infection. But no one else has managed to achieve with it the success that he has. Chiari still sticks to the original Schloffer method, and Eiselsberg uses a modification of it, going into the nose below the frontal sinus instead of through it.

Arthur Schueller is doing Hirsch's *x*-ray work. He also does the *x*-ray work of the head for the Allgemeines Krankenhaus. He is very adept at diagnosing the size, direction of growth and character of the hypophyseal tumors, and also the anatomic variations in the sella and nasal sinuses, points of importance at the operation.

Holzknecht, the chief of the *x*-ray division, is now devoting a great deal of attention to stomach and intestinal work. His "Atlas" on this subject is to appear shortly. Holzknecht's assistant, Zollschan, is coming to America this fall to deliver some lectures in New York and Philadelphia before anthropologic societies. He is the author of a book on this subject which has been much read abroad. The Vienna school of *x*-ray is generally conceded the palm at present throughout Europe for its work in diagnosis. Its advancement in this field is something which at once strikes the American student very forcibly as much ahead of our work at home. Many of the young Americans here, both surgeons and internists, are devoting much attention to it, Elliott and Straus, of Chicago, and Sears, of Portland, among others.

One doesn't hear much inquiry from the members of the Viennese profession or from physicians elsewhere in Europe, for that matter, concerning postgraduate opportunities for study for the foreigner in America; but many *do* ask about the opportunities for practice. When they find out, however, that we have already nearly three times the number of physicians in proportion to our population that Austria and Germany have,

most of them are disappointed. They also find it hard to believe that we actually admit them to practice in our country on the same basis as our own graduates, and even allow them to take examinations in their own language, and they find it still more queer that we erect no tariff wall against their household belongings, instruments and professional apparatus, on which our own returning doctors pay high duty. The graduate of an American school must put in five years' study in Austria, and then take an examination extending over some months, always in the German language, before he may practice there, and 40 per cent. of his net income thereafter becomes the property of the state. That our returning professional brothers do not make more clamor against this unequal treatment may be due to the fact that the average American citizen returning to our shores is so glad to get back to the land of pancakes, beefsteak and real newspapers, that he feels it to be cheap at any price and makes no complaint.

ROGER T. VAUGHAN, M.D., Chicago.

What Constitutes the Management of Normal Labor?

To the Editor:—In THE JOURNAL (January 27, p. 274) is an article entitled "The Management of Normal Labor." In this paper, so many statements are made which do not coincide in technic with the generally accepted teaching of our modern schools, that the Section of Obstetrics of the Jackson County Medical Society desires to register a criticism of some of the errors which are in evidence, many of which have been noted singly, as witness the following correspondence already printed in THE JOURNAL: February 10, p. 428; February 24, p. 576; March 2, p. 649, and March 22, p. 880.

It seems the most encouraging indication of the present attitude of the profession toward this subject which, for all time, has been the most important but the least understood and most abused branch of our art, that such a storm of protest has been aroused, especially from the country practitioners for whose benefit the article was ostensibly written. At this point, it may not be amiss to state that in an experience of twenty-five years, of which twenty have been partially occupied as a teacher of obstetrics, I have been brought into more or less intimate contact with former students and am convinced that the better type of country doctor is not inferior, in any degree, to his brother whose lot is cast in the city and that, being to such a degree dependent on his own devices, he, after leaving the medical school, is, by careful observation of his cases, in many instances, more resourceful and better equipped to meet intelligently the emergencies which beset an obstetric practice. Hence, when *ex cathedra* rules which are neither scientific nor sane are laid down for his guidance in a patronizing benevolence, he naturally rebels.

At our recent meeting, our former secretary, Dr. Wilhelm, introduced a resolution, which was adopted, to the effect that we register a protest to this article, on behalf of the city obstetrician and the general practitioner doing a country practice.

It is conceded that the article has many good points; and these will be accepted as stated by the writer and endorsed. It is not in a spirit of captious criticism but simply to try to help in this campaign of education in obstetrics, that we make this report.

The section referred to a committee the work of analysis and comment on the article in question and it will be understood our criticism applies only to the suggestions in the paper of which we do not approve.

In the first place, routine vaginal examinations are a menace to the parturient woman, and in some clinics in Germany, it is said, digital examination is forbidden with the result of great decrease in morbidity and no increase in fetal fatality, dependence being placed on external manipulation and observation.

The advice to lubricate the fingers and introduce them, ungloved, into the vagina is bad. Few examinations should be made. When necessary to make an internal examination, it should be with careful preparation of the arms and hands, the donning of a clean (if not sterile) gown and the wearing of gloves. Gowns and gloves are not prohibitively expensive and should be a part of the equipment of every practitioner who does any obstetric practice.

The advice to puncture the membranes is usually unnecessary as this is the ordinary sequel to complete dilatation; and one of the sources of disaster in normal labor, as well as in cases of dystocia, is premature rupture. In the right occipitoposterior position, the sine qua non is the preservation of the membranes until rotation can take place.

The anointing of the perineum is a doubtful expedient. If it has any virtue, the risks of colon bacillus infection, from the smearing of the field, would at once offset the possible benefit of the emollient.

In regard to the management of the third stage of labor, the pulling of the cord is to be condemned under all circumstances, as tending to discourage the physiologic expulsion—a folded placenta with the fetal side out; such interference also incites that tragedy of obstetrics, inversion of the uterus.

The suggestion that, in any normal case, the hand be inserted into the vagina and the placenta pulled down is preposterous. More than any other point to be criticized is the direction that the hand and arm be introduced into the uterus after a half or three quarters of an hour and the placenta forcibly detached! There can be conceived no normal labor in which such a reckless attempt would be justified and, if such method were to be tolerated, it must inevitably increase the maternal mortality.

The technic of Dr. Tweedy, master of the Rotunda Hospital at Dublin, is to be endorsed as not only an admirable expedient but a procedure based on sound scientific reasoning. Tweedy says the placenta is separated by a retroplacental hematoma which is formed in the space between the maternal surface of the placenta and the uterine wall. Indiscreet or hasty efforts by the original Credé manipulations tend to dislodge the clot and thus to interfere with the efforts of Nature to separate the placenta in a physiologic manner. Tweedy recommends, after the cord is severed, the use of a hemostat placed on the cord about 2 inches out of the vulva. When the placenta is dislodged and passes out of the uterus into the vagina, this movement will be noted by the change in the relative position of the hemostat. The fundus should then be grasped by the hand applied with the palmar surface next, the fingers extended and the placenta gently expressed.

In 1820, Charles D. Meigs warned the obstetric profession to beware of meddlesome midwifery. He said the hand introduced into the uterus was the greatest menace to which the lying-in woman is exposed.

In the light of our knowledge to-day, it is unbelievable that any man in any but a library practice of obstetrics would be guilty of such heresy as the treatment recommended in the paragraph on the management of the third stage of labor in the paper under discussion.

GEORGE CLARK MOSHER, Kansas City, Mo.
Chairman of the Section of Obstetrics of the Jackson County (Mo.) Medical Society.

University of Pennsylvania Medical Department

To the Editor:—Permit me to call your attention to an error in the item entitled, "Changes in the University Medical Department," referring to the School of Medicine of the University of Pennsylvania (THE JOURNAL, May 25, p. 1610). The statement as printed indicates that there has been an amalgamation of the University Hospital and the John H. Musser Department of Medical Research with Dr. Alfred Stengel as directing head. This is not precisely the situation. The department of medicine and the department of research medicine have arranged to cooperate in teaching and research and to have joint assistants engaged in both lines of work in the wards of the hospital and in the laboratories of the research medical department. The chair of research medicine has its own head, entirely independent of the chair of medicine. Dr. Richard M. Pearce, Jr., is the professor of research medicine, in complete charge of the department of research

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medicine, and Dr. Alfred Stengel is the professor of medicine, in charge of the instruction in medicine in the school and in the hospital of the University of Pennsylvania.

A. J. SMITH, Philadelphia, Dean.

Procuring Blood for the Wassermann Test

To the Editor:—Having seen recently several more or less complicated methods suggested for procuring blood from the veins, for the Wassermann or other tests, we thought perhaps the profession at large was not familiar with the utility of a hypodermic syringe for this purpose. For two years we have used an ordinary clean sterile glass hypodermic syringe with a 24-gauge needle. A tourniquet is placed around the upper arm so as to distend well the veins; the region of the elbow is scrubbed with tincture of green soap; then with 95 per cent. alcohol; the patient is requested to grip his hand which distends further the blood-vessels and renders it easy to insert the needle into the vein. By withdrawing the piston the barrel of the syringe fills with blood. The tourniquet is loosened, the needle removed and the small puncture sealed with a drop of collodion. The blood, when squirted into a small clean sterile bottle and corked, is ready for transportation. The simplicity of this method commends it, as does also the fact it is an easy matter to secure and boil a small bottle and a glass hypodermic syringe, or a larger one if more blood is desired.

DRS. BALLENGER AND ELDER, Atlanta, Ga.

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

VACCINE AND SERUM TREATMENT OF PNEUMONIA

To the Editor:—Please refer me to some available statistics on the vaccine and serum treatment of pneumonia.

G. A. WARREN, Black Rock, Ark.

ANSWER.—Below is a list of references on vaccine and serum treatment of pneumonia, obtained from the literature for the last five years. J. M. Anders ("Practice of Medicine") states that he has collected reports of 535 cases treated by serum therapy, sixty-one cases treated with diphtheritic serum and 474 with pneumococcus serum, with eighty-five deaths, a mortality of 18.3 per cent. The results obtained by different observers are variable and fail to carry conviction. Much the same opinion is expressed by other recent authors of textbooks. The vaccine treatment seems to be more encouraging, although still in an experimental stage. According to the general principles of vaccine treatment, the use of vaccine should be more successful in cases of delayed resolution, chronic pneumonia, etc. Vaccines have, however, been used in acute cases, but if used in this way should be given in small doses.

Crux: The Serum Treatment of Pneumonia, *Deutsch. med. Wchnschr.*, April 16, 1908.

May: Römer's Pneumococcus Serum in Cronpous Pneumonia, *München. med. Wchnschr.*, Oct. 6, 1908.

May: Action of Römer's Antipneumococcus Serum in Croupous Pneumonia, with Special Regard to the Leukocytes, *München. med. Wchnschr.*, Oct. 13, 1908.

Monte, A.: Treatment of Pneumonia with Antipneumococcus Serum, *Arch. f. Kinderheil.*, xlix, Nos. 1-2.

Batten, G. B.: Double Pneumonia with Childbirth; Pulmonary Infarcts; Injection of Vaccine of Mixed Pneumococcus; Recovery, *Lancet*, May 22, 1909; abstr. in THE JOURNAL, June 19, 1909, p. 2025.

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AN ALLEGED CANCER-CURE (COLLOID OF COPPER) AND ITS PROMOTER (GAUBE DU GERS)

To the Editor:—I would like to get some information on a cancer cure advocated by Dr. Hube Dugers, a Paris physician, who claims to cure cancer with a preparation called "colloid of copper." I have never heard of the drug before and do not know whether there is such a drug or whether it is a preparation in the Cargose Compound class. The man who asked me about it showed me a clipping from a newspaper, and, while I did not know anything about it, I thought you might give some light on the subject.

R. W. MARKLEY, M.D., Rockford, Ill.

ANSWER.—The newspapers, about March 9, published the cabled account to which our correspondent refers, but the fact that neither our European medical exchanges nor our Paris correspondent has mentioned the claims made by Dr. du Gers for his "colloid of copper" speaks against its scientific importance. Only one French medical journal has mentioned it, so far as we have seen, and this merely quoted the statement without comment. His name—which is Gaube du Gers, but has been mutilated in transmission—is given in the medical directory of France (Annuaire Médical), but without the usual date of graduation.

ANTIFORMIN METHOD OF EXAMINATION FOR TUBERCLE BACILLI

To the Editor:—1. What is antiformin and how is it prepared? 2. How is it used? C. A.

ANSWER.—1. Antiformin is a strongly alkaline solution of sodium hypochlorite, the preparation of which is described in New and Nonofficial Remedies, 1912, p. 30.

2. The collected expectoration of a number of hours is treated with an equal volume of a 20 to 30 per cent. solution of antiformin. On gentle agitation of the mixture the tenacious mucoid material will dissolve and all the bacteria, except those belonging to the acid-fast group, will be destroyed. The material is centrifugalized and the sediment is spread on slides, dried in the air, fixed by heat or by immersion for several minutes in a 2 to 3 per thousand solution of mercuric chlorid, washed off and stained as usual.

FORMALDEHYD DISINFECTION

To the Editor:—1. Does the Chicago Board of Health use formaldehyd fumigation for infectious and contagious diseases, especially small-pox? 2. How much should be used per thousand cubic feet of air-space and how long a time must a room be shut up? L. B.

ANSWER.—The following, extracted from the "Circular of Information," is the method of formaldehyd disinfection used by the Chicago Department of Health:

"The room to be disinfected is sealed and prepared as usual for sulphur disinfection, by pasting strips of paper over cracks of doors and windows. All its surfaces are exposed as much as possible; closet doors are opened and their contents, together with the contents of drawers, are removed, scattered about and the drawers left open; mattresses are set on end; pillows, bedding, clothing, etc., are suspended from lines stretched across the room or spread out on chairs and other objects so as to expose all sides; books are opened and the leaves spread—in short, the room and its contents are so disposed as to secure free access of the gas to all parts as fully as possible.

For every 1,000 cubic feet of space in the room, suspend, by one edge, an ordinary bed-sheet (2 by 2½ yards) from a line stretched across the middle of the room. Properly sprinkled this will carry, without dripping, 8 ounces of liquor formaldehydi—the 40 per cent. solution of formaldehyd gas—which is sufficient to disinfect 1,000 cubic feet of space. As many sheets as necessary are used hung at equal distances apart. The ordinary rather coarse cotton sheet should be used in order to secure rapid evaporation. The house should remain sealed not less than eight hours.

"A rosehead sprinkler used by florists can be used for sprinkling the sheets.

"After the disinfection soak all sheets, pillow slips, towels and other washable articles in the sick-room, in the strong disinfectant and remove them while wet to the laundry, to be boiled at least thirty minutes. Sprinkle thoroughly all the surfaces of pillows and of the mattresses with the strong

disinfectant and then carry into the open air, to be exposed to sunshine for at least six hours—frequently turning the articles. Mattresses and pillows should be burned or sterilized by heat if soiled by discharges from the patient. Consult the physician on this point."

LIQUID ANTISEPTIC SOAP

To the Editor:—Please give me a formula for a good liquid antiseptic soap, which does not contain formaldehyd, for general use. S. S.

ANSWER.—The following formula, which is an adaptation from the British Pharmaceutical Codex, was tried in the Association Laboratory and appears to make a satisfactory preparation:

Take of

	gm. or c.c.		
Oleic acid	35		f.℥ j
Alcohol	15	or	f.℥ ss
Potassium hydroxid	7		ʒ ij
Water	7		f.ʒ ij

Mix the oleic acid and the alcohol and add a few drops of phenolphthalein solution. Dissolve the potassium hydroxid in the water and add the solution in small portions to the oleic acid-alcohol mixture, shaking until a faint pink color is produced. Allow the neutralized product to cool and add five drops of oil of lavender and ether enough to make 100 c.c. (f.ʒiij).

VON PIRQUET TEST

To the Editor:—What is the von Pirquet's test for tuberculosis, how is it applied and what are the indications as to a positive reaction? B. P.

ANSWER.—The cutaneous tuberculin test, sometimes also called the Von Pirquet method, is applied by placing 2 drops of Old Tuberculin, diluted with 1 part or a 5 per cent. solution of phenol (carbolic acid) in glycerin and 2 parts of physiologic salt solution, on the skin and by scarifying the skin through it, preferably by the use of a special punch or needle which introduces some of the preparation beneath the epidermis. The surface of the skin is then covered with cotton wool, the covering being allowed to remain for five minutes.

In a tuberculous subject a papule forms, averaging 10 mm. in diameter, which may occasionally be succeeded by a vesicle. The reaction is at its height in from twenty-four to forty-eight hours. The color, at first a bright red, gradually fades, leaving a pigmented spot which is likely to disappear in children within five or six days, but may persist in adults for weeks.

The reaction is specific for tuberculosis, but does not distinguish between active and latent forms of the disease. In children it indicates a tuberculous process which is usually active, but in adults it gives positive results in nearly all cases, even with persons who appear to be in perfect health, but who, in consequence of the wide prevalence of tuberculosis in infancy, carry with them remnants of a quiescent or healed tuberculous focus. The latter condition is rarely of clinical importance; hence the von Pirquet reaction is of relatively little value for the diagnosis of active tuberculosis in the adult. See article on the test in THE JOURNAL, Jan. 21, 1911, p. 181.

THE PROBLEM OF A PURE WATER-SUPPLY

To the Editor:—Our city is considering the question of how to secure pure drinking-water. Is it better to try to filter our poor and contaminated lake water or to pipe spring water into town for a distance of 2¼ miles? The lake is shallow and when windy is very muddy. In the summer the water has a strong, foul odor; for two years it has been dead and stale; the outlet dry. Our sewer empties into the lake, after passing through a septic tank and filter beds, but a great deal of the sewage is not changed. Can a filter be put in that will purify, clarify and sterilize the water perfectly?

Is it practical and feasible to use aluminum sulphate to throw down lime by making a hydrate which precipitates to the bottom? Can this be done successfully in a large filtering system for city use? And will this process destroy bacteria? Some think it advisable to use spring-water for domestic use and lake-water for all other industrial use. N. B.

ANSWER.—It is always better to use pure drinking-water when it is obtainable, rather than attempt to purify water from a highly contaminated source. Nevertheless, a properly constructed and carefully managed purification plant will render even a highly objectionable water entirely safe. The danger in the latter procedure arises from the possibility of accident from negligence or ignorance. In general, it is better to eliminate the chance for such accidents as far as possible. Filters have proved a marked success in such places as Albany, Philadelphia, Pittsburgh and Cincinnati in this country. In dealing with a very turbid water, precipitation by aluminum sulphate has been found advantageous. A double system of water-supply has many disadvantages; some people are sure to use the contaminated supply for drinking purposes. An excellent discussion of the whole water question with a view to American conditions is given in Allen Hazen's "Clean Water and How to Get It," published by John Wiley & Son, New York.

Medical Economics

THIS DEPARTMENT EMBODIES THE SUBJECTS OF POSTGRADUATE WORK, CONTRACT PRACTICE, LEGISLATION, MEDICAL DEFENSE, AND OTHER MEDICOLEGAL AND ECONOMIC QUESTIONS OF INTEREST TO PHYSICIANS

POSTGRADUATE COURSE FOR COUNTY SOCIETIES

Tenth Month—Fourth Weekly Meeting

ALBUMINURIA

ETIOLOGY

1. Lesions of urinary organs, acute and chronic nephritis, renal degenerations and tumors, suppuration in pelvis, ureter and bladder, toxemias, scarlet fever and gout.
2. Slight or undemonstrable lesions. (a) Functional, physiological, after eating, exertion, violent emotions, bath. (b) Cyclic, age, associated conditions. (c) Febrile. (d) Hemic changes, purpura, syphilis, leukemia, etc. (e) Neurotic. (f) Orthostatic.[1]

PROGNOSIS

Bearing of cause, age, arterial tension, casts, general condition, influence of digestion.

CHRONIC INTERSTITIAL NEPHRITIS[2]

SYMPTOMS

Gradual insidious onset. Development of uremic symptoms, dyspnea, loss of flesh.

URINARY SYSTEM: Urine, quantity, specific gravity, albumin, casts, blood-cells.

CIRCULATORY SYSTEM: Physical examination, cardiac hypertrophy, high tension pulse.[3] Freezing point of blood. Symptoms of broken compensation later.

RESPIRATORY SYSTEM: Epistaxis, edema of larynx, hydrothorax, dyspnea, cardiac or uremic, nocturnal. Bronchitis and edema of lungs.

Gastro-intestinal disorders.

NERVOUS SYSTEM: Headache, drowsiness, stupor, convulsions. Meningitis and apoplexy, "shifting paralyses," "dead finger."

SPECIAL SENSES: Retinitis, amblyopia, amaurosis. Tinnitus, deafness, vertigo.

TREATMENT[4]

NEPHRITIC COLIC

DIAGNOSIS

Onset of pain, character, radiation, tenderness. General symptoms. Duration and terminations. Differentiate from biliary colic, intestinal colic, appendicitis.

TREATMENT

Heat, locally, internally, baths. Posture. Physiologic and therapeutic effects of morphia, chloroform.

Monthly Meeting

Differential Diagnosis of Coma.

Early Diagnosis and Treatment of Chronic Nephritis.

Relation of Nephritis and Cardiovascular Disease.

[THIS ENDS THE COURSE FOR THIS SEASON.]

1. Progressive Medicine, December, 1909.
2. Emerson: Archives of Internal Medicine, June, 1908.
3. Janeway: Am. Jour. Med. Sciences, January, 1907. Elliott: Am. Jour. Med. Sciences, May, 1910.
4. Progressive Medicine, December, 1904. Tyson: New York Medical Journal, Feb. 3, 1906.

JOURNAL Announcements, Knocks and Boosts, Books Received and changes in the Public Service will be found in the advertising section, commencing on the second page following reading matter.

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Medicolegal

A Privileged Communication

(Hays vs. Hays (Ind.), 97 N. E. R. 198)

The Appellate Court of Indiana, Division No. 1, holds an objection was properly sustained to a question asking a physician to state what conversation, if any, he had with a patient at his office, with reference to the compensation she was receiving as a clerk in the defendant's store. The suit was one brought by the administrator of the estate of the patient to recover a sum claimed to be due for services. The defendant called the physician as a witness. Before ruling on the objection to the question stated, the trial judge examined the witness, in the absence of the jury. He testified that the patient usually came to his office every Sunday morning; that she had been his patient for about six months and at the time in question she was not well and came to his office for treatment; that she was consulting him as her physician; that he advised her to get away from the store and take a vacation; that she said she was not able to pay the expenses, to which witness answered that he did not see why; that she replied, "I don't get as much probably as you think I do;" that the witness then asked her how much she got; that he gave her some medicine and prescribed for her at the time the conversation took place; that he was instructing her about her health, and was advising her to go away; that he made the inquiry that he might know whether she could go or not, and that he made the inquiry of her as a patient. The court thinks that the inadmissibility of the question asked the physician was, under the circumstances, shown by the plain reading of the Indiana statute which provides that physicians shall not be competent witnesses "as to matter communicated to them as such by patients, in the course of their professional business, or advice given in such cases." Besides, the decisions of the Supreme Court of the state have given the act a broader meaning than its language imports, the prohibition having been held to include, not only communications and advice, but all information acquired by the physician while treating or attending the patient in his professional capacity.

Results and Opinions of Experts Thereon in Actions for Malpractice

(Sawyer vs. Berthold (Minn.), 134 N. W. R. 120)

The Supreme Court of Minnesota affirms a judgment for $2,000 damages for the alleged negligent and unskilful treatment of a fracture of the plaintiff's wrist. She was a woman 46 years of age, who fell on the stairs at her home, sustaining a Colles' fracture of the tip of the radius and the ligaments in the wrist joint. The defendant, a physician and surgeon, was immediately called. He diagnosed the case correctly, and treated the injured wrist by the application of splints and bandages. About six weeks after the accident he determined that a union had taken place, removed the splints and bandages, and ceased treating the plaintiff. At the time of the trial the hand was in an abnormal, deformed position, the plaintiff having little or no use of the hand or fingers, and continuing to suffer pain. The result, whether of the fracture, or of the defendant's treatment, was admittedly bad.

The evidence to show that the defendant's treatment was unskilful or negligent was the testimony of experts, based wholly on the result, and evidence of an admission by the defendant that it was a bad job and he had made a mistake. One expert witness for the plaintiff testified in substance that such a deformity following a fracture of the wrist such as the plaintiff sustained would generally indicate improper treatment, though he qualified this by the statement that there are some cases in which such a result cannot be avoided. An expert witness for the defendant, while testifying that the treatment was proper, said substantially that if, when the bandages were removed, the hand was in the same position as it was at the trial, there was something wrong, and it would not be good treatment for the attending physician to quit the case. He also testified that, if the hand had been properly set, it ought to have been practically straight at the end of six weeks. The court holds that, while, on the entire evidence, a verdict for the defendant would have been justified, the case was one for the jury to decide, and that the verdict was not so against the weight of the evidence that it ought to be interfered with after the trial court had approved it; nor on the ground of excessive damages.

It is undoubtedly correct, the court says, that negligence of a physician or surgeon cannot be inferred from a poor result alone. There must be evidence from expert witnesses tending to show improper or unskilful treatment, in order to sustain a charge of malpractice against the physician. But this is not saying that an expert witness may not base his opinion that the treatment was improper wholly on the result, or that a court or jury cannot base its decision on such an opinion. Without the assistance of expert evidence, it is entirely logical and correct to say that the result furnishes no evidence of negligent treatment; but there doubtless are cases where evidence of a poor result alone would convince an expert that the treatment must have been improper, and in such cases the court can see no reason for excluding the opinion based on such evidence, or in refusing to give weight to such opinion. The court does not draw the inference of negligence from the result but from the evidence of the experts. Therefore, the opinion of the plaintiff's expert was properly received in evidence, and, with the evidence of the admission by the defendant, made a prima facie case, and the trial court properly refused to dismiss at the close of the plaintiff's case.

Society Proceedings

COMING MEETINGS

Amer. Assn. of Genito-Urinary Surgeons, Philadelphia, June 7-8.
American Climatological Association, Hartford, Conn., June 10-12.
American Ophthalmological Society, Atlantic City, June 12-13.
American Otological Society, Atlantic City, June 10-11.
Maine Medical Association, Portland, June 12-13.
Massachusetts Medical Society, Boston, June 11-12.
Michigan State Medical Society, Muskegon, July 10-11.
New Jersey Medical Society, Spring Lake, June 11-13.
North Carolina Medical Society, Hendersonville, June 18-20.
Rhode Island Medical Society, Providence, June 12-13.
Washington, Idaho and Oregon associations, Portland, July 5-8.
West Virginia State Medical Association, Webster Springs, July 10-12.

ASSOCIATION OF AMERICAN PHYSICIANS

Twenty-Seventh Annual Meeting, held at Atlantic City, N. J., May 14-15, 1912

The President, DR. J. GEORGE ADAMI, Montreal, in the Chair

Officers Elected

The following officers were elected for the ensuing year: President, Dr. L. F. Barker; vice-president, Dr. Simon Flexner; secretary, Dr. George M. Kober; recorder, Dr. S. Solis Cohen; treasurer, Dr. J. P. Crozer Griffith.

Washington was chosen as the place for the 1913 meeting.

President's Address: Some Things the Association Could Do

DR. J. GEORGE ADAMI, Montreal: I suggest that our association might take the initiative in a plan to have the government provide a building in Washington in which various national and international societies might hold their meetings, and in which their archives might be kept safely. The association might also provide a medal which could be bestowed, as occasion arises, on those who, in the opinion of our body, have made some advance of the first order in medicine. Also, for the same object an annual lectureship could be founded as a means of honoring those who make notable advances in our science.

Clinical Study of the Effects of Sleep and Rest on Blood-Pressure

DRS. HARLOW BROOKS and JOHN CARROLL, New York: Numerous physiologic researches on man and the lower animals have shown that there is a marked fall of blood-pressure during sleep. In our experiments we found that the night

pressure, taken in groups of night sleepers, was almost invariably lower than the day pressure in the same individual, but that, conversely in night workers and day workers the finding was reversed. Neither very high nor very low pressures were included. The pressure was found to vary from 6⅔ mm. to 44.8 mm. lower during sleeping than during waking hours. The slightest drop in pressure took place in those whose usual pressure was lowest. The maximum fall took place about two hours after sleep began. Still greater variations occur under exceptional circumstances or in neurotic individuals, classes excluded from this study. Attempts to secure even a temporarily lower twenty-four hour pressure by prolonging or deepening the sleep were apparently without avail; nor was the degree or persistence of the drop increased by artificial means, as by large dosage of bromid or chloral. It may be said that attempts at lowering blood-pressure are perhaps as harmful as they are futile.

DISCUSSION

DR. THEODORE C. JANEWAY, New York: Fall in systolic blood-pressure is not at all synonymous with fall in the mean blood-pressure. The excessive fall in the high-pressure cases obtained during sleep I think about corresponds to the fall in mean pressure, and is largely due to the diminished size of the pulse-wave at the periphery during sleep. While Dr. Brooks does not feel that he has seen marked effects from rest, I feel quite sure that I could produce a number of charts to show the surprising effects from simple rest. To what extent the element of physical rest can be separated from the sleep element is questionable. The element of mental rest is, I think, a rather important one in the sleep question—not merely freedom from excitement, but freedom from actual mental tension. I think Dr. Brooks is too pessimistic about the therapeutic application. It suggests that one of our most important duties is to secure not merely sleep, but normal, rhythmic sleep at the proper time as a means of safeguarding the heart.

DR. JOSEPH L. MILLER, Chicago: Mental rest is quite as important as sleep. We must bear in mind that individuals with high blood-pressure show extreme variations from day to day, and if the patient's pressure is taken over months, perhaps daily, or two or three times a week, we are surprised to find, without any apparent cause, that such an individual may show variations of pressure of 40, 60 and sometimes 100. I am under the impression that high pressure may at times be traced to some worry or something which we are not able to learn from the patient.

DR. W. S. THAYER, Baltimore: I also have seen striking reduction of the blood-pressure in association with simple and continued rest in bed. Several years ago a man consulted a colleague because of severe headache. There were evidences of chronic nephritis with a blood-pressure of about 220 mm. Under vigorous treatment with nitrites the patient became anuric and comatose. Return of the urinary secretion and recovery from the uremia occurred in association with a rise in the blood-pressure to a point between 190 and 200.

DR. S. SOLIS COHEN, Philadelphia: In the vast majority of cases, carefully studied, high blood-pressure is not materially affected by prolonged rest in bed. Occasionally we find a patient who shows some marked defect, but usually the decline is small. On the other hand, we do find elevation of pressure in cases of exhaustion from rest. The point that has struck me in the course of these observations has been the sudden, and for the time inexplicable, changes of high degree in the course of a day.

DR. LEWIS A. CONNER, New York: One of the most important clinical effects we see is the beneficial effect in cases of chronic hypertension of rest in bed.

The Effect of Various Forms of Respiration

DR. D. L. EDSALL, St. Louis: If the rate is very rapid and the amplitude poor, the result may be poor, and *vice versa*. A slow deep breathing that is not labored may be more efficient and economical than the other forms of breathing. In studies made last winter with Benedict's respiration apparatus my friends and I assumed various types of breathing often seen clinically. In contrasting the very superficial, rapid form of breathing that one frequently sees in bad cardiac cases, pneumonia and other conditions of that kind with the very slow, but entirely unlabored, form of breathing, we always had a feeling that less had been accomplished by the very superficial type of breathing than by the very deep or normal type. We found by the record that ventilation was lowest with this type. Ventilation was always very much greater with the superficial form. When there is a struggling in respiration, the tendency is to increase the filling of the chest constantly and keep at a constant condition of partial inspiration. Thus morphin reduces effort, but it makes the respiration more efficient; respiration accomplishes its function better by quieting the irritability of the respiratory centers.

The Study of Respired Air in a Case of Cyanosis without Dyspnea

DR. C. F. HOOVER, Cleveland: The patient was a man, 50 years old, who had chronic bronchitis and emphysema with moderate myocardial disease. There was pronounced cyanosis without dyspnea. The cyanosis was not dependent on any impairment of the mass movement of blood. The minute volume of respired air was eight liters per minute and poor in carbon dioxid, but relatively rich in oxygen. The alveolar air was rich in carbon dioxid and relatively poor in oxygen. Further, experiments showed that in spite of an abundant tidal air, the ventilation of the pulmonary infundibula was impaired.

Organic Matter in the Expired Breath, and Its Significance

DR. M. J. ROSENAU, Boston: We took condensed moisture from expired breath through a suitable, simple apparatus by means of cold condenser, taking care to filter the inspired breath so as to eliminate all protein matter of every kind. This clear watery fluid was injected into guinea-pigs and produced no more inconvenience to guinea-pigs than so much sterile water would do. After letting the guinea-pigs rest a few weeks and then injecting a second time with normal human blood-serum, part of them reacted definitely to anaphylaxis. There is a substance in the condensed moisture from the expired breath capable of sensitizing guinea-pigs so that they will react to a second injection of normal human serum. In accordance with the usual interpretation, this means that this organic matter is protein, is specific and is doubtless the same as the albuminous matter in the blood. In other experiments I exposed a number of guinea-pigs in a room with dogs so that the expired protein matter in the breath of dogs would be breathed in by the guinea-pigs. Testing these guinea-pigs with serum, we found that some of them responded. That may give us a cue for the way in which individuals sometimes become senstized to horse-serum. We know that almost all these unfortunate cases have severe symptoms after the first injection of horse-serum, but we have never known how they became sensitized.

Studies in Experimental Pneumonia

DR. DAVID RIESMAN and DR. JOHN A. KOLMER, Philadelphia: The pneumococcus is conceded to be the cause of pneumonia in man, but the *experimentum crucis*, the reproduction of the same disease in animals, has not been made. We have repeated the experiments of Lamar and Meltzer in eleven dogs and have succeeded in producing pneumonia in seven, the four failures being probably due to using a catheter with a lateral instead of a terminal opening. We are, however, not convinced that the process induced in the animals can be called lobar pneumonia. It appears to us that in our cases at least we had to deal with a confluent lobular bronchopneumonia. In an endeavor to obtain some light on the crisis of pneumonia, we injected rabbits subcutaneously with extract of normal lung in the stage of red hepatization and extract of lung in the stage of gray hepatization. Sixteen days later the animals were injected, this time intravenously, with the same material with which they had been sensitized. Those receiving the normal lung and red hepatized lung died in every instance of anaphylactic shock, in five or six minutes. Those receiving extract of gray lung became ill, but recovered without exception within ten minutes. Though we have speculated on this interesting phenomenon, we have at present no theory to offer, but hope to continue the investigation.

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Experimental Studies on Pneumococcus Infection in Animals

DR. A. B. WADSWORTH, New York: Virulent pneumococci when studied in the test-tube, and as compared with many other bacterial species, are exceptionally insusceptible to both bacteriolysis and phagocytosis. Virulent pneumococci in the body tissues are also insusceptible to the action of most of the immune serums with which attempts have been made to cure the infection in both man and animals. Yet recovery takes place spontaneously in both animals and man. In order to determine why it is that the significance of pneumococcus immunity is so strikingly manifest in the recovery of man from lobar pneumonia, and the action of the blood serums of immunized animals on the pneumococcus so singularly inadequate in the test-tube and in the treatment of infection, the following series of experimental studies were undertaken. These comprise studies on the action of dead pneumococcus cultures on animal tissues, on the action of immune serums on the pneumococcus, on the action of elevated temperatures on the pneumococcus, on the action of hyperthermy on pneumococcus infection, and finally, studies on the action of immune serums on pneumococcus infection and of the mechanism of recovery from pneumococcus infection. In general, it was found that the dead pneumococcus cultures failed to incite disease processes comparable with those seen in active infection, but that an adaptive tissue reaction was incited which rendered the animal immune and gave rise to the well-known agglutinative, precipitative, lytic and opsonic activities in the blood-serum.

From the study of the action of immune sera on the pneumococcus under ordinary conditions, it was found that the insusceptibility of the pneumococcus to bacteriolysis and phagocytosis was due to the exceptional virulence, adaptation and growth of this organism. But in the tissues both lysis and phagocytosis took place and the activity of the pneumococcus was, therefore, inhibited or neutralized in some subtle manner. The thermal limits of pneumococcus growth were found to approximate very closely temperatures often attained by the pneumonia patient, and the bactericidal action of immune serums at these temperatures was greatly exalted. These significant results were further supported by those obtained in the study of the effect of hyperthermy on pneumococcus infection by which it was shown that, although the animal organism may be injured, the activity of the infectious agents may be inhibited markedly during the hyperthermy under certain conditions, the most important of which is the presence of an active protective mechanism in the tissues. Finally, it was found from the results of the study of the action of immune serums on pneumococcus infection that the curative action of antibacterial and antitoxic serums obtained by the immunization of animals with dead virulent pneumococcus cells and with culture filtrates free from bacterial cells is slight, whereas serums obtained from animals immunized with virulent living cultures possessed marked curative action inducing crisis. In the mechanism of such recovery the neutralization of the products of the pneumococcus, whether toxins or endotoxins, was found to be the dominant determining factor to which the destruction of the bacteria, whether extracellular by bacteriolysis or intracellular by phagocytosis, was incident.

DISCUSSION

DR. RUFUS I. COLE, New York: The use of this serum clinically has not been of any value and we have tried to determine on what this depends. We have found that one very quickly reaches the point where no amount of serum injected into the animal will save him. The body must produce some additional protective substance, some complementary substance, which is necessary for the animal in addition to the serum. We feel that this is at least one of the reasons why such serum is not effective, and our efforts in the future must be stimulated toward inducing the animal to produce these additional substances.

DR. S. J. MELTZER, New York: In immunizing against pneumonia it is necessary to distinguish between the local reaction of the pneumonia, the reaction of its course in the lung and the toxemia of which the animal or human being is sick and dies.

(To be continued)

ILLINOIS STATE MEDICAL SOCIETY

Sixty-Second Annual Meeting, held at Springfield, May 21-23, 1912

(Concluded from page 1769)

Brill's Disease (Mild Typhus Fever)

DR. S. STROUSE, Chicago: If typhus fever is endemic in New York, especially among the immigrant classes, it is only logical to assume that the disease will be found in other localities, like Chicago, where both immigrants and lice may be said to abound. The important points in the clinical picture are: (1) short incubation period; (2) sudden onset; (3) chills, headache and apathy; (4) a fairly constant temperature, falling by crisis over night, on the eleventh day; (5) negative blood culture and Widal reaction, with leukocyte count of 9,400. It is highly probable that the disease seen in the United States will remain the mild type, and it is just as probable that it will be found in most large cities. Nevertheless, it must always be borne in mind that the transition of the disease from Brill's type to the Mexican type is not impossible. For these reasons clinicians and boards of health should be on the lookout for the malady.

Duodenal Ulcer

DR. E. B. COOLEY, Danville: The typical duodenal ulcer pain comes on regularly, a long time after eating—three or four hours—also at night. Tar-colored stools are present without the accompanying vomiting of blood, and a constant pain to the right of the median line, which radiates to the sternum or the right flank. If the ulcer is located in the stomach, dyspeptic disturbances predominate, especially vomiting. In ulcer of the duodenum these disturbances and vomiting are rare. In ulcer of the stomach occult blood is found in the stomach contents and also in the stools. The relation of the pain to the taking of food plays a most important rôle in the differential diagnosis. The increase or decrease of the stomach secretions is not significant here, as hyperchlorhydria occurs not only in ulcer of the stomach, but in ulcer of the duodenum, and the alleged statement of Moynihan that recurring hyperchlorhydria is a medical term for a surgical condition is without foundation. The valid reasons for operation are recognized to be perforation, repeated intestinal hemorrhage, cicatricial stenosis of the duodenum, with or without gastric dilatation, failure to yield to medical treatment, and recurring cholecystitis.

DR. ROBERT S. MCCAUGHEY, Hoopeston: I wish to emphasize the necessity of repeated examinations for occult bleeding in all cases of digestive diseases. Innervation disturbances produce ulcer. Through resulting spasmodic or hypertonic contractures of the muscularis mucosæ, a local ischemia brings about a quantitative nutritional disturbance. The mycotic origin of some ulcers is established by clinical observation and animal experiment. It is considered a relatively infrequent factor. Devie and Chavet, Perry and Shaw together report 140 cases of ulcer of the duodenum in which twenty-four cases of Bright's disease occurred. Whether in these cases and in ulceration occurring in uremia, there are changes in the vessel walls, we do not know. Too little attention has been given to the condition of the vessels of the stomach and bowel.

Bronchial (Egg) Asthma

DR. K. K. KOESSLER, Chicago: There exists a form of bronchial asthma which is undoubtedly due to a diathetic anaphylaxis towards hen's eggs. In most cases of bronchial asthma the causative factor lies in an allergic reactibility of the human individual. The multiplicity of asthmatogenous substances is explained by the multiplicity of anaphylotoxins.

Orthostatic Albuminuria

DR. EVERETT J. BROWN, Decatur: A large number of the albuminurias of childhood and young adult life are harmless. Never condemn a patient to a regimen, either dietary or hygienic, of Bright's disease simply because he has an albuminuria. The morning urine of all albuminuries should be tested, especially if there is no high blood-pressure or other cardiovascular signs. Heller's test for albumin should be discarded, as it often fails to show albumin in the most dangerous form of nephritis.

The Abdominal Crisis

DR. ALLEN B. KANAVEL, Chicago: In the early hours of an acute abdominal lesion, before a distinct pathologic diagnosis is possible, we may by certain symptoms and signs be able to recognize a condition as surgical rather than medical. To aid in lessening the mortality due to delayed diagnosis, it is urged that this group of symptoms and signs shall be recognized as a surgical entity to which the name "abdominal crisis" may be justly applied and under which diagnosis consultation may be called and operation performed when necessary. These remarks must not be construed as an advocacy of the dictum "operate when in doubt," but rather of the principle, "operate when there is no doubt."

AMERICAN ASSOCIATION OF MEDICAL MILK COMMISSIONS

Sixth Annual Meeting, held in Louisville, April 30-May 1, 1912

(Concluded from page 1712)

The Relation of Bovine to Human Tuberculosis, and Its Pathogenicity for Man

DR. MAZYCK P. RAVENEL, Madison, Wis.: Dr. Park, of New York, says that in the various hospitals of New York from 6.75 to 10 per cent. of the fatal cases of tuberculosis in children are of the bovine type. He further says that 300 children die in New York every year from bovine infection and that he has no reason to believe that other large cities of this country are not similarly situated in this respect. He says that of nine children who died of tuberculosis in the Foundling Hospital, five showed bovine and four human infection. Summarizing Dr. Park's and other statistics, we find that of 787 adults examined, 777 showed human infection and ten bovine infection; in children from 5 to 15 years of age, of 153 cases examined, thirty-six showed bovine and 117 human infection; in children from birth to 5 years of age, of 280 cases examined, sixty-five showed bovine and 216 human infection. Taking these figures as they stand, I do not see how any one can deny the danger of bovine tuberculosis in children.

Taking the last report of the British Royal Commission, we find that, of a total of 108 cases of tuberculosis investigated, eighty-four yielded human tubercle bacilli only, nineteen bovine tubercle bacilli only (a little less than 20 per cent.), and five both bovine and human tubercle bacilli. About 24 per cent. of all cases showed bovine tubercle bacilli. This report further shows that, although the bovine tubercle bacillus may be solely responsible for certain cases of pulmonary tuberculosis, and though it may be present with the human tubercle bacillus in the bronchial glands, it is evident from the data recorded that the majority of cases in which the bovine tubercle bacillus is the infective agent in the human being are cases of alimentary tuberculosis. Such are cases of cervical gland and primary abdominal tuberculosis. In the latter class of cases, at least, the tubercle bacillus has unquestionably been swallowed. Taking both classes of cases (cervical gland and abdominal) together, numbering thirty-eight, there are seventeen in which the bovine bacillus alone was found, nineteen in which the human bacillus alone was found, and two in which both were found. Taking the primary abdominal cases alone, it is seen that in sixteen out of twenty-nine the bovine bacillus was found; in fourteen of these it was the sole infective agent present.

DISCUSSION

DR. HENRY L. COIT, Newark: Dr. Park's last report, which Dr. Ravenel referred to, reads: "Taking all cases of tuberculosis in children which result in death, 10 per cent. are bovine and are due to milk; taking all cases of tuberculosis occurring in children, including non-fatal cases, such as glands, joints, bones, etc., which require surgical attention, from 20 to 30 per cent. are bovine and are due to milk."

DR. JOHN R. WILLIAMS, Rochester: I do not think we have any way of accurately determining the prevalence of bovine tuberculosis, simply because these cases are usually of the non-fatal type and we have no means of ascertaining the identity of the infection in a living child. Last summer in the Infants' Hospital in Rochester I examined thirty-three children admitted to the hospital for bowel trouble, with no suggestion of tuberculosis, and ten of these cases reacted to the von Pirquet test. Eight of these ten children had been fed on ordinary market milk. To me this is strongly suggestive that there is much greater danger than we comprehend in feeding children raw market milk.

DR. LOUIS C. AGAR, Brooklyn: I do not think Dr. Coit was correct in quoting Dr. Park to the effect that so large a percentage of cases was due to the bovine bacillus and, therefore, due to milk. That does not necessarily follow; the organisms may have been ingested with other foods.

While it may be true that 10 per cent. of the fatal cases of tuberculosis in children are of the bovine type, still we must remember that the number of deaths from tuberculosis in children form only a very small percentage of the total number of cases. While we have a large number of infections in children, most of the deaths are in adult life.

DR. MAZYCK P. RAVENEL: As far as I know, the only way for a baby of less than 2 years of age to get bovine infection is by drinking milk. While cattle unquestionably cough out the germs just as man does, children of this age hardly tend the cattle.

Municipal Milk Problems

DR. J. R. WILLIAMS, Rochester, read a very instructive and entertaining paper, illustrated by lantern-slides, concerning the problems connected with the production and distribution of both market and certified milk.

Bacteria Count of Milk Grown on Media of Different Reactions

DR. LEON K. BALDAUF, Louisville: The object of this investigation, undertaken at the suggestion of Dr. Henry E. Tuley, was to determine the most favorable temperature, 20 C. or 37 C., and the reaction most suitable for the growth of milk bacteria. The medium was a 1.5 per cent. agar, cleared with albumin and titrated against twentieth-normal sodium hydroxid, phenolphthalein being used as the indicator. Batches of neutral, 1 per cent. and 1.5 per cent. agar were prepared. In all, fifty samples of milk from different dairies were examined. The following conclusions were reached:

1. If plates incubated at 37 C. are examined at the end of three days, when for many samples the maximum count is reached, we find 1 per cent. acid agar slightly the most suitable medium.

2. In some samples the maximum count is reached at the end of five days, and here, if an average is taken, we find a larger number of colonies on 1.5 per cent. agar; the difference, however, is slight.

3. On plates incubated at 20 C. the count increases rapidly from day to day until the fifth day is reached.

4. The count of all plates at the end of five days varies little if incubation is done at 37 C.; more so if incubation is done at 20 C., the average here being somewhat smaller.

DISCUSSION

DR. HENRY E. TULEY, Louisville: It seems to me this paper illustrates the fact that we should require uniformity of technic. If one commission counts at the end of forty-eight hours, another at the end of four days and another at the end of five days, the results are not going to be uniform. Our manual recommends forty-eight hours as the proper time. Dr. Baldauf's experiments have shown, however, that in most instances the maximum count is reached in three days. What has been the practice of the Essex County Commission in this respect?

DR. HENRY L. COIT, Newark: I think it is forty-eight hours.

Certified Milk, Past, Present and Future

ERNEST KELLY, Bureau of Animal Industry, Washington: In the past, in contests conducted by the Department of Agri-

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culture, certified milk and cream have proved themselves to be far superior to the finest products of the market milk dairies. On the side of the producer success is not so marked. Replies received to communications sent out to certified milk producers indicate that, as a self-supporting business, the movement is not yet on a satisfactory basis. This appears to be due to (1) too many small dairies trying to produce certified milk; (2) the fact that markets for certified milk have not been developed as they should be; and (3) the fact that there should be a more equitable system of distribution; some of the middlemen seem to charge exorbitant prices for distribution.

From the consumer's standpoint, the use of certified milk has accomplished much good wherever it has been possible to obtain it. It is necessary for the greatest good that prices be kept within reasonable bounds, and this I believe can be done by closer application of business principles, by the elimination of much ornate and expensive equipment, by a more equitable system of distribution, and by the expansion of the markets. My experience is that clean milk is not a question of white enamel and polished brass so much as of common-sense and eternal vigilance.

DISCUSSION

MR. NEILL ROACH, Louisville: Did Mr. Kelly, in figuring the cost of distribution and the percentage the middleman receives, take into consideration whether the producer or the distributor furnished the bottles, whether the distributor took the entire output of the producer, etc.? Such things would make a vast difference in the amount the middleman would have to charge.

T. C. MCCLEAVE, Berkeley: The comparative bacterial counts of milk and cream as outlined by Mr. Kelly are of great practical value. It has usually been considered that the greater portion of the bacteria contained in milk go over with the cream. Mr. Kelly has shown that the average bacterial count of milk was from 8,000 to 9,000, while that of cream was from 9,000 to 10,000. I think you will find that in the requirements for certified milk and cream, while the bacterial count for milk is required to be 10,000 or less, the producer is allowed a count of 25,000 to 50,000 for cream. It would appear that we are making the requirements for cream too liberal from a bacteriologic standpoint.

MR. G. M. WHITTAKER, Milwaukee: Is not Mr. Kelly of the opinion that if he had sent out an equal number of inquiries to market milk producers in New England, the West and South, he would not have found an even greater number of producers who claimed to be producing milk at no profit?

MR. ERNEST KELLY: I made the statement that local conditions might vary the figures given a great deal. I think it is probable that, if an equal number of inquiries had been sent to market milk producers, an equal or greater number would have said that the business was unprofitable, but I do not believe the average market milk producer has any figures on which to base his statements, such as the certified milk producer has.

Some Bacteriologic Problems in Certified Milk Production

DR. P. G. HEINEMANN, Chicago: It seems to me that the time is ripe for a revision of contracts entered into between the medical milk commissions and the dairies, and the creation of a permanent board of control of the actions of milk commissions. The terms of some contracts are too exacting in certain respects. Consequently, expensive equipment with investment of large sums of money is encouraged. It has been demonstrated that milk equal to certified milk, so far as bacterial counts are concerned, can be produced in inexpensive barns, but under prevailing methods of inspection, certified milk cannot be produced in these barns. It seems advisable, therefore, that this association elect a permanent body from among its members, to investigate periodically the methods of milk commissions, and to pass on the efficiency of experts employed by the commissions. Only by employing *real* experts can certified milk be produced which is absolutely above reproach.

MEDICAL ASSOCIATION OF GEORGIA

Sixty-Third Annual Session, held in Augusta, April 17-19, 1912

(Concluded from page 1710)

Cholecystitis as a Complication of Pellagra

DR. H. F. HARRIS, Atlanta: We often find symptoms of nervous indigestion and a subacute catarrh, with coated tongue and foul breath in the early cases of pellagra, and there appears to be a relationship between this condition and catarrh of the gall-bladder. It is noteworthy that the catarrhal condition, unlike those encountered from other causes, seems in no way to be affected by washing the stomach out with nitrate of silver, alkaline and salt solutions, nor is the digestion benefited by these measures. The results would also indicate that hypochondria, which is always associated with digestive disturbances, and usually with a foul tongue, may be likewise due to catarrhal changes in the gall-bladder, whether the original condition producing it be a maize poisoning or some other. This would seem to open up a field for investigation for the surgeon and the pathologist as well as for the general clinician, and might lead to interesting and important developments. As to whether or not the operation of drainage is likely to result in cure in any considerable proportion of cases I cannot say, but it seems not impossible that this is still another field of medicine which is destined to be taken from the general practitioner by the surgeon.

Psychoses Accompanying Pellagra

DR. E. M. GREEN, Georgia State Sanitarium: The seventy-five cases on which this study is based were all admitted to the state sanatorium during the year 1911. The diagnosis was made from symptoms referable to the skin, mouth and intestinal tract. Cases of pellagra which developed subsequent to the patients' reception are not included. In considering the subject of psychoses accompanying pellagra it is necessary to decide, first, the question whether the two conditions, insanity and pellagra, appear in accidental association. Where a large number of cases is found the simultaneous appearance of pellagra and insanity in a previously normal individual—as occurred in eight cases of this series—or where after pellagra has existed for a few weeks or months, insanity is manifested, or where several attacks of pellagra have occurred, each one accompanied by an outbreak of insanity, from which the patient recovers as the physical disease disappears, the conclusion that pellagra must be the cause of the mental disorder is indisputable. Of the thirty-three cases in which the duration of both pellagra and insanity could be ascertained, it was found that the average duration of the former disease was six months and seventeen days before the appearance of the mental symptoms. Evidences of mental disorder accompany a large proportion of the cases of pellagra. In the seventy-five cases admitted during the past year, in which a diagnosis of "psychosis accompanying pellagra," the following types were noted: Infective-exhaustive, thirty-five cases; manic-depressive, eleven cases; dementia præcox, eleven cases; general paralysis, four cases; senile, four cases; involution melancholia, two cases; undetermined, eight cases. The infective-exhaustive type was the one most frequently encountered, forming 46.6 per cent. of the whole number. In the series of cases studied, associated with the symptoms of the psychoses simulated, are found additional ones which are foreign to the usual course of such cases, besides quite noticeable nervous symptoms which do not accompany these psychoses, and which we are justified in attributing to pellagra.

DISCUSSION

DR. W. R. HOUSTON, Augusta: The diagnosis of pellagra is often very difficult, especially in those vague cases of neurasthenia, hysteria, and some of hypochondria. There are two facts about pellagra that deserve consideration; one is the seasonal recurrence and the other is that the disease is almost entirely confined to warm climates. These two facts seem to point to a protozoon as the cause of the disease.

DR. E. C. THRASH, Atlanta: There is no doubt that pellagra will be rife in the country until a food commission is established which will carefully inspect maize products. Frequently

a car-load of corn is shipped to a small town and the grain dealer, finding it moldy, ships it back to the owner, who does not destroy it, but dries it, converts it into meal, and ships it back to the same merchant who has refused it, so that a product not fit to feed stock is fed to human beings. It is very seldom that a load of moldy corn is destroyed. While I have performed very few autopsies on patients dead of pellagra, I have made careful microscopic examinations of some of the tissues. In one instance there was marked albuminous degeneration and cloudy swelling of the kidneys and the liver-cells. The same degenerative changes that occur in yellow atrophy were present in a mild form. The first change noted in the brain-cells was a cloudy swelling due to some toxic condition.

DR. E. BATES BLOCK, Atlanta: I have seen several cases of cholecystitis associated with pellagra, and have attributed it to the general mucous membrane involvement in pellagra. The majority of the cases I have seen have shown dementia, depressive insanity, or dementia præcox. The symptoms of pellagra, so far as the skin lesions are concerned, are of nerve distribution; they do not follow the line of the blood-vessels, or the motor or sensory nerves but follow the distribution of the sympathetic system. The effect of sunlight may be a factor, but not the chief factor, in the production of these eruptions, because they are seen on parts not exposed to the sunlight.

DR. GEORGE C. MIZELL, Atlanta: Pellagra has no climatic limitations; it has occurred in Buffalo, in South America, Brazil, Argentina, and other places. In the North there does seem to be a limit to the 70th parallel of latitude in July; in the South the 70th parallel for January. The situation as it exists in Georgia has made therapeutic agnostics of many of us, but I believe the disease can be cured. The fact that there is disturbance of the stomach and an inflammatory action of the gall-bladder is not evidence that the patient still has pellagra. These things become dependent on the pellagrous process. I have seen instances of cholecystitis in a number of cases of pellagra but there is no part of the body which it may not affect.

DR. JAMES N. ELLIS, Atlanta: I have operated on two patients for cholecystitis without any suspicion that they had pellagra and subsequently I found the typical symptoms of the disease. The cases were unmistakably cases of chronic cholecystitis.

DR. J. W. PALMER, Ailey: I would like to know, if you accept the damaged corn theory, how you can explain the disease in patients who have not eaten maize or corn.

DR. H. F. HARRIS, Atlanta: For two years I have been going over the literature of pellagra published by the Italians and have found nothing that proves definitely and scientifically that corn and corn products are the cause of pellagra. On October 1, I fed six dogs on bad corn products and up to date two have died with symptoms very suggestive of pellagra. The other dogs are failing rapidly in the same way, and from their present appearance two will survive but a short time. I do not know what changes occurred in the cord. If I am able to find definite and characteristic changes in the spinal cord, it will be the first instance in which it has been really proved that bad corn produced pellagra. There was no doubt but that the changes that occurred in pellagra were permanent and were only secondarily influenced by medication of any sort. In regard to cases of pellagra occurring where maize had been excluded, it is very difficult to state positively that any person has not partaken of corn products some time in the past. The best one can do is to give tonics and build the patient up, but relapses will occur. Neither drugs nor anything else have any specific action on the disease; the best Italian observers think there is no doubt of the truth of this statement. Possibly the disease may be caused by some of the products of distillation, as in Roumania the disease was caused by drinking corn whisky.

Kidney Symptoms and Diagnosis

DR. M. L. BOYD, Atlanta: Cystoscopy, like percussion and auscultation, is, in the hands of a suitable man, capable of the keenest development. Its limitations have as yet not been defined and new instruments are constantly being devised and new conditions discovered. Marked edema of the orifice indicates stone in the lower ureter, or acute tuberculous ureteritis. No operation should be performed on a kidney without knowledge of the functional ability of the other kidney; the value of the functional test has increased considerably since the introduction of the phenolsulphonephthalein test. In cases of simple hematuria this test helps us by showing the amount of destruction of the kidney and thereby assisting us to differentiate between a malignant destruction of the kidney and the bleeding from such conditions as renal varix. The conditions which cause obstruction to the flow of urine from the kidneys may be classified as (1) obstructions due to slightly movable kidney, and to aberrant or abnormal bands of fascia or branches of the renal artery; (2) abnormally movable kidney causing severer symptoms; (3) stone in the pelvis or ureter; (4) tumors, ulcers, etc., of the ureter, kidney, kidney pelvis or bladder; (5) stricture of the ureter; (6) pressure on the ureter by tumors, etc., and (7) urinary obstruction in the lower tract. It is rather unusual for fairly well-marked partial obstruction to the flow of urine to exist very long without an infection occurring above the obstruction. Where the infection is more or less acute we find infecting organisms and pus in the urine, an increase in the amount of pus, if some has already been found, and fever of the septic type. Rigor and chills are common. There is a moderate increase in the number of white blood-corpuscles. Tenderness and muscular rigidity in the lower back and kidney region behind are noted, and the cystoscope usually shows a reddening and swelling about the ureteral orifice, with the ejection of cloudy urine. The infection in these cases nearly always becomes chronic. The infection nearly always affects both kidneys if the obstruction is in the lower urinary tract.

The Value of Ureteral Catheterization

DR. W. F. SHALLENBERGER, Atlanta: Cystoscopy and ureteral catheterization with urine segregation together with the functional tests are the best and most reliable methods for accurate kidney diagnosis and by these procedures we are enabled to obtain perfectly dependable knowledge that could be gained in no other way. For diagnostic purposes the ureteral catheter is invaluable. Bacteriologic cultures can be made directly from the kidney and the organism determined in cases of infection. The ureteral catheter is also useful in determining and locating strictures of the ureter, or impacted stones, and in making a diagnosis of stone in the ureter or renal pelvis. One of the greatest advantages of the ureteral catheter is that it enables us to make a differential determination of the functional activity of the kidneys. Numerous methods have been proposed and a large variety of drugs tried in search of an ideal means of accurately determining the functional activity of the kidney. Quite recently Geraghty and Rowntree, of Baltimore, have tried out phenolsulphonephthalein, which seems to answer all the requirements for an ideal drug for functional tests. It is easy of administration; it appears quickly in the urine, and is readily excreted by the kidneys. It is non-toxic, even in large amounts, and the exact percentage put out in a given time can be readily estimated by means of a colorimeter. The ureteral catheter is useful in the treatment of some conditions. In cases of pyelitis, lavage of the renal pelvis with dilute silver solutions or other solutions is easily accomplished and is very efficacious. The ureteral catheter is also of aid in operative work.

DISCUSSION

DR. J. R. B. BRANCH, Macon: Many patients go from physician to surgeon and from surgeon to physician complaining of pain in the right side of the abdomen and there is no way of making a positive diagnosis of the condition, except by the use of ureteral catheterization. This, in addition to the use of the cystoscope, is very important. I have seen a normal kidney removed when it was the kidney on the opposite side that was at fault; if these cases are thoroughly worked out, such mistakes would not occur. In anchoring the kidney, it is very important that one should anchor it to the twelfth rib.

DR. A. L. FOWLER, Atlanta: I wish to speak of the disappointments of *x*-ray work. I have worked in Paris and have

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seen pictures showing stones which were not found at operation. In using the injections of collargol, the pictures should be taken with the patient in the prone position. The phenolsulphonephthalein test is ideal for testing the functional activity of the kidneys. I use the blue test together with the urea test.

DR. JOHN S. DERR, Atlanta: I wish to confirm what Dr. Shallenberger stated in regard to the advantage of the use of collargol injections. A dilated ureter can be readily shown on the *x*-ray plate and the calices of the kidney are well brought out.

DR. M. L. BOYD, Atlanta: By the injection of collargol one can get some idea of the relation of the pelvis of the kidney to the kidney itself, and the distance should be measured from the middle line rather than from the spinous process. The phenolsulphonephthalein test is very valuable and shows the actual functional capacity of the kidneys.

DR. W. F. SHALLENBERGER, Atlanta: In one patient the kidney pelvis held about 60 c.c. of fluid, and there was a good-sized hydronephrosis. I suspended the kidney and three weeks later found that the capacity of the pelvis had decreased from 60 c.c. to 35 c.c. This shows how an obstruction that causes a hydronephrosis can be relieved and the hydronephrosis clear up as a result of operation. Without the use of phenolsulphonephthalein it is not possible to determine just what the kidneys are doing.

Two-Step Method of Enucleation of the Prostate

DR. A. L. FOWLER, Atlanta: It is the history of nearly all prostatics that the symptoms referable to the genito-urinary tract are of long standing, of gradually increasing urgency and of such severity as greatly to disturb the patient by day and persistently to interrupt his sleep at night. A combination of such factors undermines the nervous system. The physical examination will disclose a prostate bulging into the rectum, sometimes only into the bladder; there will be residual urine, and so forth. As a rule, the patient's vitality is too low to permit of a prostatectomy. What does such a patient need? Free urinary drainage, absolute physiologic rest to the internal and external vesical sphincters, and the bladder and the building up of his exhausted vitality. This much-needed rest can be obtained by a rapid suprapubic cystotomy. The edges of the incision into the bladder-wall are stitched to the muscular fascia, and a two-way irrigating glass drainage-tube is inserted, the wound covered with gauze and a mound of gauze is built up well under the arm of the glass drainage-tube to prevent it from gravitating to the vesical mucosa. The urine is siphoned off and studied. The bladder is irrigated twice daily with a hot oxycyanid of mercury solution. These irrigations are continued until the bladder becomes clean. Soon the patient will be in prime condition for the removal of the prostate through the original suprapubic opening. The advantages of this method are, free drainage, rest to the damaged organs, giving the patient two little shocks instead of one big one. This latter factor is of undoubted value in operating on men whose vitality is below par.

DISCUSSION

DR. E. C. BALLENGER, Atlanta: If a large cannula is introduced through the suprapubic region with the bladder distended, the trocar withdrawn and the catheter left in place, ample drainage is secured. By this method there is no shock or leakage about the wound. The condition of the kidneys improves when such drainage is provided. This operation is especially valuable when the patient is much debilitated.

DR. W. L. CHAMPION, Atlanta: When the patient's vitality is low it is hazardous to attempt to remove the prostate at one operation. Personally, I believe that the suprapubic operation is better than the perineal.

DR. W. B. HARNMAN, Commerce: I have seen the Mayos do this operation and they followed the method outlined by Dr. Boyd. They had catheter drainage and in all cases did the suprapubic operation. The catheter was left in a number of days with constant irrigations after the operation.

DR. A. L. FOWLER, Atlanta: A man can be trained to retain the catheter; some of my patients have retained it for two months at a time, but these bladders do not become as clean as do those which are drained suprapubically. When suprapubic drainage is employed, there should be absolute rest of both the internal and external sphincter muscles.

The Treatment of Pulmonary Tuberculosis by Gas Compression of Lung

DR. D. T. HARRIS, Highlands, N. C.: We have had thirty-four patients on whom this operation has been performed, and we operated on two of them after the nitrogen gas had been absorbed, one of them five months after the last filling. Nine of these cases were unilateral in whom a complete pneumothorax or compression was produced. The process was arrested in 100 per cent. of the cases. There were adhesions in two. There was an effusion in one case during the course of treatment and in another five months after discontinuing the treatment, following an attack of grip and pleurisy. The gas had entirely disappeared and the effusion could hardly be said to have had any connection with the treatment. There were five unilateral cases in which there was an incomplete pneumothorax. All of them had heavy adhesions. Ten of the cases were bilateral, and in nine of these the process was arrested. In four the process was arrested in both lungs, and in four the process on the unoperated side remained more or less the same. There was incomplete or no pneumothorax in ten of the bilateral cases, and there were adhesions in all of them. Five of them were remarkably benefited, even with the small collapsing that was produced. The process was arrested in 68.42 per cent. of uni-bilateral cases.

The Present Status of Specifics in the Treatment of Tuberculosis

DR. E. C. THRASH, Atlanta: My efforts now, with the help of Dr. A. H. Bunce, are being directed toward producing a polyvalent vaccine that will, to a degree, be a specific in mixed infections. We are now using the autogenous vaccines, in connection with tuberculin, with marked beneficial results. We know that the pyogenic organisms constantly found in tuberculous sputum are the pneumococcus, streptococcus, and all of the varieties of the staphylococcus, and that, as a rule, other organisms play but a little part in producing the complex commonly called consumption. We know that polyvalent vaccine made from these pyogenic organisms found in tuberculous processes will lessen the toxemia, decrease the amount of suppuration, increase the resistance, and improve the general condition of the sufferer, and used in connection with the tuberculin, will aid in its efficiency.

DISCUSSION

DR. T. J. MCARTHUR, Cordele: It was important that we make a diagnosis of tuberculosis early. There are few of us who have practiced for many years who cannot now remember cases of incipient tuberculosis that were unrecognized then. We must recognize our responsibilities in these cases. One should watch the pulse, the temperature and the weight.

DR. L. C. ROUGLIN, Atlanta: Tuberculosis is not a disease for the specialists; it properly belongs to the general practitioner. The care of these patients by the general practitioner is the only possible solution for the reduction of the number of cases. The home treatment of the patient is the most successful when properly carried out. The percentage of cures resulting from home treatment is larger than the percentage of cures in sanatoriums or by specialists. Often, even in advanced cases, examination fails to reveal the presence in the sputum of the tubercle bacilli. The presence of the tubercle bacilli in the sputum is only confirmatory evidence of the presence of tuberculosis and does not make a positive diagnosis. Another important point in the diagnosis is the unilateral râles, especially after coughing.

DR. CLAUDE A. SMITH, Atlanta: I wish to emphasize the point that when a physician makes a diagnosis of tuberculosis it is his duty to find out where the patient got it and how many of the friends and members of the patient's family were infected with the disease. This is particularly necessary among the negroes and the poorer whites. They should go

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back to natural habits and do what they can to raise the resisting powers of the individual. Open-air sleeping lessens the danger of contracting other communicable diseases. It is incumbent on every community to provide suitable buildings in which the negroes and poorer whites afflicted with tuberculosis can be cared for.

Intestinal Resection in Strangulated Inguinal Hernia

DR. W. W. BATTEY, JR., Augusta: In operating I would lay stress on the following points: Divide the external ring before the sac is opened. Do not attempt to reduce contents of the sac before the sac is thoroughly irrigated with salt solution. Do not cut the fibers of the conjointed tendon in order to reduce contents of the sac. In cases in which resection is necessary, it is a wise plan to introduce a small drainage through one angle of the incision to accomplish a double purpose. First, we are likely to have an abscess due to the colon bacilli. Second, the stitch line in the bowel may become infected, involving the possibility of a fecal fistula which the tube or drainage will take care of. Personally, I prefer the lateral anastomosis in all cases in which it can be employed.

DISCUSSION

DR. JAMES N. NILES, Atlanta: As to the choice of an anesthetic in these cases, I believe that in oblique strangulated hernias cocain lessens the danger of the operation, is easily given and with very satisfactory results.

DR. W. L. COOKE, Columbus: I use local anesthesia, except in children, when I prefer a general anesthetic.

DR. J. R. B. BRANCH, Macon: I wish to emphasize the importance of early diagnosis in these cases; surgeons are very much discouraged in their work when patients are sent to them three or four days after the onset of symptoms. The physician tries calomel, then taxis, and finally sends the patient to a surgeon. This is not fair to the surgeon or to the patient. Lateral anastomosis is better and safer than the Murphy button. In judging of the vitality of a piece of intestine, if it is black or purplish, place it in hot water and wait to see whether or not it regains its color. A better method is to mark the location of the strangulation with a piece of tape, then place it back into the peritoneal cavity where it belongs and let it stay for a reasonable length of time; if the circulation is not restored, then go ahead and do what is necessary.

DR. FLOYD W. MCRAE, Atlanta: Taxis in such cases is dangerous and unsurgical. I do not like doing this operation under cocain anesthesia. Under general anesthesia one can go ahead and complete the work required, and more efficient work can be done, especially where one has to deal with an inflamed intestine. In these cases it is a question whether a lateral or an end-to-end anastomosis is the better procedure.

DR. J. L. CAMPBELL, Atlanta: In my opinion there is no greater danger from a general anesthetic than from a local one, especially when it is given by a careful man. I have had little experience with resection in these cases, but I believe that a lateral anastomosis gives better results and is by far the best method to employ.

DR. E. C. CARLEDGE, Atlanta: If a surgeon got these cases early he would employ taxis. I use taxis and depend on gravity to help put the bowel back where it belongs. In these cases one must decide quickly what is best for the patient. If the bowel cannot be reduced at once, a surgeon should be called.

DR. S. T. HARRIS, Highlands: In many patients, taxis properly applied is worthy of a trial, but it requires one who is skilled in doing the work. If taxis is properly applied there should be little traumatism. In one case in which taxis had failed, the application of a tobacco poultice reduced the strangulation.

DR. EDWARD G. JONES, Atlanta: The present-day intelligent treatment of hyperthyroidism is based on the assumption that a reduction in thyroid secretion is desirable. Medical treatment has been notoriously inefficient. A symptomless goiter appearing at puberty, for example, need not be operated on except for pressure symptoms, or for cosmetic reasons, or to remove a certain undoubted tendency toward hyperthyroidism later. It should at least be given a somewhat extended chance to disappear spontaneously or to be cured by less drastic measures than surgery. The argument that it can be removed without danger is true but is not always acceptable. A patient who has passed through a more or less typical history of hyperthyroidism, but who now exhibits typical myxedematous symptoms, but with relics of hyperthyroidism, not only is a bad immediate surgical risk, but also will not improve by any kind of operation unless it be required to relieve pressure symptoms. A woman who has a goiter with no past history of hyperthyroidism, but with present hypothyroid symptoms, will not be cured by operation. She will be injured unless all the actually functionating tissue be left.

Intestinal Obstruction with Report of Experimental Work

DR. J. L. CAMPBELL, Atlanta: I have recently operated in fourteen cases of intestinal obstruction with two deaths. Experiments were made on nine dogs and one cat. In four the arteries and veins to 6 inches of the small intestines were ligated and the intestines returned to the abdominal cavity, the wound closed and dressed. When the dogs died, the pathology of the condition was carefully studied. Reports will follow later.

Parsimony in Nutrition

DR. GEORGE M. NILES, Atlanta: It is the custom of many medical men to put patients on dietaries without considering the caloric values contained therein; this is a common illustration of parsimony in nutrition. The appetite of healthy individuals will generally prove a reliable index to bodily needs, but in digestive disorders accompanied by malnutrition it is not enough for the physician to cut off offending articles of food; he should also see that sufficient calories are being furnished. I wish to sound a note of warning concerning the alcoholic proprietary foods on the market; a few years ago I saw a genuine attack of delirium tremens complicate a case of typhoid in which for two weeks the patient had been generously "supported" by a well-known and popular proprietary food. In this connection I wish to commend the thorough and impartial work of the Council on Pharmacy and Chemistry of the American Medical Association, whose lucid reports have done much to dispel the glamor thrown about some of these alcoholic "supportives," and individually, I wish to speed the Council in its meritorious labors. Some of the most graphic examples of parsimony in nutrition are exhibited in infants whose eager digestive organs are vainly attempting to glean sustenance from some of the infant-foods on the market. Another greatly overrated class of foods leading to parsimony in nutrition are the meat juices for which fabulous powers have been claimed. As to meat extracts, they are beyond parsimony—they are a delusion and a snare. There is a point where economy ceases and parsimony begins, and there certainly can be no permanent healthy growth, nor can there be maintained a normal "moving equilibrium" in the bodies of individuals or nations, unless there is a liberal intake of protein food, for, as Rubner declares "A large protein allowance is the right of civilized man." It may confidently be asserted that no physiologic nor mathematic legerdemain can ever hope to reduce materially the fixed demand for approximately 120 gm. of protein daily for every active individual of average weight.

Clinical Manifestations of Uremia from a Diagnostic Standpoint

DR. RALSTON LATTIMORE, Savannah: A high blood-pressure, when taken into consideration with other clinical symptoms, is valuable from a diagnostic and prognostic viewpoint. Yet many people die of renal insufficiency and exhibit a normal or a practically normal blood-pressure. In a word, the key to the whole situation is not what passes through the kidneys, but what does not pass. It is not because the kidneys allow some albumin to pass every day that there is danger, but because the diseased kidneys do not allow the elements of depuration to pass in proper quantity. They may accumulate rapidly and the major symptoms of uremia appear, and if slowly we have minor uremia.

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PROCEEDINGS OF THE ATLANTIC CITY SESSION

MINUTES OF THE SIXTY-THIRD ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ATLANTIC CITY, N. J., JUNE 3-7, 1912

HOUSE OF DELEGATES

First Meeting—Monday Morning, June 3

The House of Delegates, the legislative body of the Association, meets on Monday, the day before the commencement of the scientific part of the session. The House met in the Traymore Solarium, and was called to order at 10:15 by President J. B. Murphy. He first called on the Committee on Credentials. The chairman of this committee, D. Chester Brown of Connecticut, presented a preliminary report, showing that at that time seventy-one delegates had registered. The secretary then called the roll and, a quorum being present, the business of the session was taken up. The minutes of the Los Angeles meeting were approved and reference committees were appointed.

President Murphy then addressed the House of Delegates. His address will appear in the next issue of THE JOURNAL. The regular reports followed. First that of the Secretary, then the report of the Board of Trustees, the report of the Judicial Council and that of the Council on Medical Education. These reports were before the House in the form of a bound pamphlet and they were referred to the appropriate reference committees. The morning session of the House then adjourned. The reports referred to were as follows:

Report of the Secretary

To the Members of the House of Delegates of the American Medical Association:

For the year 1911-12, I submit the following report:

MEMBERSHIP

The membership of the American Medical Association on May 1, 1911, was 33,960. During the past year, 299 members have died, 1,301 have resigned, 500 have been dropped as not eligible, 987 have been dropped for non-payment of dues, and 64 have been removed from the rolls on account of being reported "not found," making a total of 3,151 names to be deducted from the membership list. There have been added 3,474 names to the membership roll, of which 2,353 were transferred from the subscription list. The membership of the American Medical Association on May 1, 1912, was 34,283, a net increase for the year of 323. The membership on May 1 of each of the last five years was as follows:

1908	31,343
1909	33,935
1910	34,176
1911	33,960
1912	34,282

MEMBERSHIP OF STATE ASSOCIATIONS

The membership of the various constituent state associations, according to the records in the Secretary's office, May 1, 1912, is shown in the accompanying table.

AD INTERIM COMMITTEES

Since the last meeting of the House, June 29, 1911, the following appointments have been made by the President:

A committee to represent the American Medical Association at the Third National Conservation Congress was constituted and the following were appointed:

William A. Evans, Chairman, Chicago; Abraham Jacobi, New York; Norman Bridge, Los Angeles, Cal.; Hubert Work, Pueblo, Colo.; Oscar Dowling, Shreveport, La.; The Very Reverend Andrew J. Morrissey, South Bend, Ind.

The following changes in the personnel of the committees have been made during the year:

Committee on Nomenclature and Classification of Diseases.—Cressy L. Wilbur, Chairman, Washington, D. C., vice Frank P. Foster, New York City, deceased. Frank B. Mallory, Boston, vice Alexander Duane, New York City, resigned.

Component Association	No. Counties in State.	No. Component Societies in State Assn.	No. Counties in State Not Organized 1911	No. Counties in State Not Organized 1912	No. Physicians in State (3d Ed. Directory)	No. Members of State Association	No. A. M. A. members in State	No. Subscribers to Journal in State.*
Alabama	67	67	..	..	2,418	1,646	323	266
Arizona	14	8	6	6	247	128	98	62
Arkansas	75	62	9	11	2,596	954	349	215
California	58	36	21	21	4,767	2,232	1,662	943
Colorado	61	26	29	22	1,772	846	508	303
Connecticut	8	8	..	..	1,564	842	450	246
Delaware	3	3	..	..	246	105	50	35
Dist. of Colum.	..	..	..	..	1,350	580	282	239
Florida	47	26	22	21	974	329	175	180
Georgia	146	63	52	81	3,022	1,408	349	415
Idaho	26	4	10	10	420	103	75	106
Illinois	102	97	3	2	9,988	5,647	3,219	1,474
Indiana	92	85	4	6	4,984	2,146	1,071	544
Iowa	99	96	1	2	3,653	1,978	1,071	619
Kansas	105	69	17	22	2,688	1,358	638	387
Kentucky	119	113	6	5	3,601	2,099	628	303
Louisiana	60	40	18	18	1,930	1,002	385	350
Maine	16	15	3	1	1,176	606	280	117
Maryland	24	22	2	2	1,972	1,106	569	508
Massachusetts	14	18	..	..	5,648	3,393	1,631	959
Michigan	83	60	6	3	4,104	2,227	1,063	607
Minnesota	86	38	5	5	2,262	1,319	925	465
Mississippi	79	50	8	9	2,009	955	228	265
Missouri	114	94	13	18	6,037	2,695	1,566	539
Montana	28	11	16	17	512	229	123	143
Nebraska	92	61	26	23	1,796	957	484	305
Nevada	16	6	10	10	144	69	48	30
N. Hampshire	10	10	..	..	704	536	221	55
New Jersey	21	21	..	..	2,884	1,443	757	357
New Mexico	26	14	12	12	430	164	109	81
New York	61	57	3	3	14,815	7,088	3,553	1,574
N. Carolina	98	85	4	6	1,849	1,126	251	297
N. Dakota	46	14	5	5	594	388	228	115
Ohio	88	88	1	..	7,513	3,328	1,849	780
Oklahoma	77	64	6	12	2,620	1,089	360	333
Oregon	34	12	2	3	1,041	426	232	222
Pennsylvania	67	63	4	4	11,345	5,724	2,774	1,490
R. Island	5	6	..	..	751	377	234	154
S. Carolina	43	37	..	5	1,275	688	210	273
S. Dakota	65	9	7	8	651	272	168	157
Tennessee	96	63	33	33	3,338	1,373	433	408
Texas	245	138	77	85	5,888	3,081	884	573
Utah	27	6	21	21	427	228	158	109
Vermont	14	11	3	3	679	389	155	63
Virginia	100	..	..	..	2,359	1,488	422	324
Washington	38	18	10	19	1,630	819	486	321
W. Virginia	55	32	11	10	1,639	941	355	182
Wisconsin	71	55	2	2	2,652	1,726	906	473
Wyoming	14	5	10	9	235	118	52	50
Canal Zone	..	..	..	..	107	72	25	19
Hawaii	..	..	..	..	123	79	25	11
P. Islands	..	..	..	..	691	108	33	37
Totals	2,935	1,986	500	545	138,120	69,661	33,135	18,772
Honorary members and members listed at foreign addresses						78		.....
Members in government services						1,070		.....
Journals to foreign addresses, government services, etc.								2,102
Grand totals							34,283	20,874

* Not including members of American Medical Association.

NOTE.—The number of members of the different associations stated in this table is in accord with the membership of the several associations as they were reported to the Secretary on May 1, 1912.

The lack of an effective uniform system for reporting the membership of the state associations accounts for whatever discrepancies this table shows and detracts from the value of the statement.

Component societies are those societies which compose the state association. A component society may include one county or more.

1. These state associations are divided into district societies, and these are listed in the table as component societies. Some of these districts are smaller and some larger than the county, the county lines being ignored.

2. There are two component societies in St. Louis County—the St. Louis City and the St. Louis County Medical societies—each, however, covering definite territory.

3. Provision is made for the physicians in each of these counties to join the component society in an adjoining county.

4. Virginia has not adopted the plan of organization. Hence, strictly speaking, it has no component county societies. Members join the state society direct.

Committee on Anesthesia.—Yandell Henderson, Chairman, New Haven, Conn., vice George E. Brewer, New York City, resigned. Thomas S. Cullen, Baltimore, appointed to fill the vacancy on the committee.

Committee to Consider the Mode of Commemorating the Completion of the Panama Canal.—M. L. Graves, Galveston, Texas, vice Amos Graves, San Antonio, deceased.

REAPPORTIONMENT

The attention of the House is called to By-Law, Section 3, Chapter 3, page 9. This is the year for reapportioning the delegates of the various state associations. The by-law requires that the House of Delegates shall appoint a committee of five on reapportionment of which the President and Secretary shall be members. I suggest that this appointment be made early in the session so that the Committee may report to the House as promptly as possible.

During the past year there has been some conflict regarding the scope of the work of the special committees that were appointed at the last meeting of the House of Delegates and the established Councils of the Association. In order that all the activities of the Association may be coordinated it is advisable that the House of Delegates extend the courtesies of the floor to the members of the various Councils and especially that it request the secretaries of these Councils to attend the sessions of the House, according them the privilege of the floor, in order that the House may be constantly in position to obtain information concerning work that is being done by these Councils and that this body may direct these activities.

Another matter that must be brought to the attention of the House of Delegates is the fact that there is a vast amount of work to be accomplished during the four days of the meeting, and I urge that the House take time to properly consider the matters presented and to act with serious deliberation on them. In order that this end may be attained, it is advisable that the reference committees shall meet at places and times which shall be publicly announced in order that not only members of the House but that the members of the Association may appear before these reference committees. The House should know, when a reference committee reports, that it has carefully considered the subject and that an opportunity to be heard has been granted all members who are interested in the question. I fully appreciate that this will occupy a great deal of the time of the members of the reference committees, but the importance of the work commands the service of the delegates.

It is advisable that the House of Delegates define precisely what is understood by the term "invited guest." A number of the Sections have desired to invite scientists who are eligible to membership in component societies of the American Medical Association but who have neglected to obtain this membership, to present papers before their Sections. The ruling in the past has been that as associate membership is limited to those who are not eligible to regular membership in the Association, so it is evidently intended that "invited guests" shall be limited to those who are not eligible to membership in the organization. Reading the section of the by-laws with reference to invited guests, it will be noted that this is not definitely stated since the term "scientists" can be held to include certain men who can become members in their local societies. If the House concurs in the precedence that has been established, Section 9, Chapter 1 of the by-laws should be amended to read as follows:

"Sec. 9.—Invited Guests.—Scientists, who are not eligible to membership in the component society of the locality in which they reside, may be invited by the general officers or by the officers of a Section to attend any annual session and to take part in the scientific work. They shall be designated as invited guests and be entitled to participate in the scientific and social functions."

REPORT OF THE JUDICIAL COUNCIL

One of the most important reports submitted this year to the House of Delegates is that of the Judicial Council, embodying as it does a revision of the Principles of Medical Ethics, so framed that it may be regarded as a code of laws governing the membership of this Association. This report should have the serious consideration of the House. I wish to add that the Council has gone over the revision proposed at both meetings which that body held and that a number of the preliminary proofs of the revision were submitted to the past officers of the Association and a considerable number of the House of Delegates for their criticism. With the three exceptions the fifty-nine replies received have endorsed the general principles announced. Of these three, one asked that no action be taken and that the Council should omit this portion of its report; a second made no criticism except that the whole revision was unworthy of consideration; and in the third, it was suggested that the subject be referred to a special committee and no action be taken until after mature deliberation. The fact that the Judicial Council has spent a year in drafting the present form of revision seems to answer this third objection. However, the entire subject is presented to the House of Delegates for its consideration but it must be remembered that unless some action is taken at this session, the Judicial Council will have no laws under which cases may be brought to its attention until the Association does frame some legal code.

Respectfully submitted,

ALEXANDER R. CRAIG, Secretary.

Report of the Board of Trustees

To the Members of the House of Delegates of the American Medical Association:

Gentlemen: In submitting our annual report for the past year we congratulate you on the continued prosperity of the Association, on the splendid work it is doing through its publications and its councils for the improvement in medical education, and for the enlightenment of the public regarding health matters and public sanitation in its broadest conceptions.

DAVIS MEMORIAL

It is a pleasure to state that Library Hall in the new building has been dedicated to the memory of Dr. N. S. Davis and a bronze statue of the distinguished founder of the Association will be placed therein. Though a modest recognition, it is intended as an honor and a tribute to his high character and his services to the cause of humanity, and to the profession which he loved and so faithfully served throughout a long professional life.

With your endorsement, Mr. Frederick G. Hallett, Secretary of the Conjoint Board of London, was invited by the Council on Medical Education to its annual conference in Chicago in February last. The Council asked the Board of Trustees to authorize the payment of Mr. Hallett's expenses; this authorization was granted, and his expenses were paid from the fund appropriated to the Council. The Council will doubtless report fully as to the value and importance of his visit.

Concerning the resolution by the sections on the preparation of text-books, the Trustees believe that at the present time the publication of text-books in the manner suggested in the resolution which was referred to the Board is not advisable.

THE BUTTON

In our report last year we recommended that you reconsider your action relative to substituting a new design for the official button and emblem of the Association. We presented no argument—except that the new design was unsatisfactory from the standpoint of manufacture,—which is of small moment expecting that the matter would be discussed in the House of Delegates, or that a hearing would be granted by the Reference Committee before which the subject would automatically go. The Committee in its report, which included several other matters, recommended that the action of the previous year should stand. The report was adopted without discussion; in fact, without the subject being given any consideration whatever by the House. Did we not believe that the matter was of sufficient importance to warrant careful consideration by the House of Delegates, we would not bring it before you again.

The emblem of the Association is something more than the button; it is, in a sense, our trade-mark. It is used as such, at least, on our books, pamphlets, etc. Not only this, but as a button on the lapel of the coats of our members—over 20,000 have been distributed—it has become well known, and is generally recognized as the emblem of the organized medical profession. It would seem, therefore, that this emblem should not be radically changed unless there are very special reasons for doing so. So far as we know, the only reason given is the law passed by Congress seven years ago. This law, however, specifically exempts "persons, corporations or societies that

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actually used . . . the said emblem, sign or insignia prior to Jan. 5, 1905." In other words, we have just as much right to use this emblem now as we had before the law was passed. Further, so far as we know, this law has not been enforced even as to those who started to use the red cross since the law was passed.

The old button is distinctive; it means something in and of itself. Even the layman recognizes it as meaning something distinctive, and seeing it on the lapel of a physician's coat, at once appreciates its significance. The new button, on the contrary, has no significance, except to a very few who are versed in mythology. It is not distinctive; is meaningless unless it is explained, and few would be able to explain it. The design submitted by the original committee, two years ago, was larger than the one finally adopted, and the words "American Medical Association" were printed in full. The reduction in size and the substitution of the initials "A. M. A." for "American Medical Association," have made the proposed button still less suggestive than in its original form. We feel, therefore, that if we must have a new emblem, something more appropriate than the one you have adopted should be worked out. A design for a button and trade-mark must satisfy certain definite conditions. It must be simple, distinctive, easily recognizable and capable of satisfactory reproduction in metal, enamel, type and embossing. These conditions are not met by the new design. An emblem must possess something besides artistic merit to be acceptable.

We desire to again emphasize the fact that changing the emblem of the Association is worthy of careful consideration, and we hope before a final change is made that the matter will be discussed on the floor of the House of Delegates. The Board passed a resolution to the effect that the old design be retained as it has long since become a distinct trade-mark and there are other reasons why it should be retained.

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MEMBERSHIP IN THE AMERICAN MEDICAL ASSOCIATION

This question in its relation to component societies and the National Association has been referred to the Board of Trustees. It has been considered by the Board on more than one occasion in its meetings and in reports to the House of Delegates. We regret not being able so far to make a satisfactory and final report. The question was referred to the state societies for action and report to the Board. Most of them evidently did not understand it and did not take specific action. The committee appointed by the President and the Board of Trustees, to investigate and elucidate the matter, will report to you. With our present knowledge and under present conditions, we feel compelled to refer the whole matter back to the House of Delegates for more elaborate inquiry and fuller investigation, believing it should be made a special order for your consideration.

POSTAL RATES

We are glad to announce that the Board has modified the records of the membership and subscription departments so that these are now satisfactory to the Post-Office Department relative to second-class rates. To comply with the requirements of the Post-Office Department it was necessary to make slight modification in the By-Laws. The Board has made these modifications; they are as follows:

The first paragraph of Sec. 2, Chapter 1, has been modified to read:

"MEMBERS.—Any physician, reported as a member in good standing of a constituent association by the secretary of that association, who on the prescribed form shall apply for membership and subscribe for THE JOURNAL, paying the annual dues for the current year, shall be a member."

Sec. 5 of the same chapter (Chapter 1) has been changed to read:

"DELINQUENCY.—Any member who, for one year, has failed to pay his annual dues, shall forfeit his membership thirty days after notice from the Secretary has been mailed to his last known address."

Chapter XIII has been modified to read as follows:

"The annual dues shall be five dollars, payable in advance on the first day of January of each year, of which not less than four dollars shall be credited to the subscription for one year to THE JOURNAL."

The above modifications were submitted to the Post-Office Department at Washington, and received its approval.

The President's Commission on Post-Office matters, in its report, has recommended an increase of second-class postage rates from 1 cent to 2 cents a pound. If this increase is adopted by Congress, it means, of course, the doubling of our second-class postage bill, which last year amounted to $22,435, and this year will be more.

ORGANIZATION TRANSFER RECOMMENDED

The Board feels that "organization" should be transferred from the Council on Health and Public Instruction to the Judicial Council. The plan toward which we have been working for several years is the organization of a series of permanent councils which shall cover the various activities of the Association. When the Council on Health and Public Instruction was created it was understood that it would have under its jurisdiction the various activities of the Association as they related to the public; as for instance, legislation, defense of research, public education, cooperation with non-medical organizations, etc. The broadening of the functions of the Judicial Council makes it the council to which, we believe, will gradually be transferred the various activities affecting the profession itself. In other words, there will be one—the Judicial Council—to have general supervision of all matters affecting internal relations of the profession; the other—the Council on Health and Public Instruction—all matters affecting external relations of the organization—that is, its relation to the public and to non-medical organizations. "Organization" naturally comes under the Secretary of the Association, who is now Secretary of the Judicial Council.

This general subject was discussed by the Board of Trustees at its last meeting, and by the Council on Health and Public Instruction, and by the Judicial Council, all favoring the transfer of "organization" to the Judicial Council.

The Board therefore recommends the following changes in the By-Laws:

Strike out the word "organization" from line 8, paragraph 2, section 5, chapter XIX of the By-Laws.

Insert at the end of the second paragraph of section 4, chapter XIX the words "(4) to all matters regarding organization of the medical profession."

LENGTH OF SECTION PAPERS

At its annual meeting in February, the Board passed a resolution limiting papers read before the sections to four printed pages of THE JOURNAL and the discussion by each speaker to 500 words, unless otherwise ordered by the publication committee of the Board. The object of these changes, slight in the average case, is to enable the management to publish section papers within a reasonable time and before the matter is stale, and also to give more space to valuable current literature than is now afforded. We believe this will be for the best interest of all concerned. Readers of papers in the sections are limited to twenty minutes and most of them can, without sacrifice of important matter, be abbreviated when necessary, so as to conform to these requirements.

THE ARCHIVES OF INTERNAL MEDICINE AND THE AMERICAN JOURNAL OF DISEASES OF CHILDREN

The *Archives* is now in its fifth year, and may be regarded as a success. The paid circulation on the first of January, 1912, was a little over 2,100 copies—a slight increase over the preceding year. To some this may not seem a large circulation, but it must be remembered that this periodical does not appeal to the great majority of practitioners. At the same time it means the publication of scientific work and articles that otherwise might not be published, and placing the matter in the hands of those who desire it at a moderate price.

The circulation of the *Journal of Children's Diseases* at the end of December, 1911, was approximately 2,000 copies. A circulation this large was not to be expected; it shows, however, that such a journal was needed. Of course it appeals only to those who are especially interested in the advanced scientific knowledge relating to pediatrics.

Neither the *Archives* nor the *Journal of Children's Diseases* could be published by private enterprise, without financial support from advertisements of a questionable nature; even with our facilities for printing and distribution they are barely paying the cost of publication. There was a slight loss on the *Archives*, but this resulted from the increased amount of matter. The two volumes for 1911 contained 1,730 pages, 25 per cent. increase over the average of previous years.

To meet frequent requests from every section of the country, where two or more members in good standing occupy the same office, the Board by resolution authorized the Editor and General Manager to send the *Archives of Internal Medicine*, or the *American Journal of Diseases of Children*, in lieu of the Association JOURNAL to such members as may make application therefor, provided the full annual dues for the year have been paid.

SURGICAL JOURNAL

A petition of about 100 of the most distinguished surgeons of the country has been presented to the Board of Trustees urging the publication of a surgical journal by the Association. The matter has been discussed for two years and preliminary steps were taken by the Board a year ago. An editorial board was appointed but there was no satisfactory agreement as to the form and character of the journal. The petition suggested a salaried editor and an advisory editorial board. The editorial board appointed recommended the publication of a journal along the lines of the *Journal de Chirurgie*. The Trustees, at their last meeting in February, believing it best to institute a journal along modest lines in the beginning, passed a resolution authorizing the publication of a surgical journal to be edited and managed by an editorial board, similar to those of the *Archives of Internal Medicine* and the *American Journal of Diseases of Children*. Nothing has yet been done, but it is understood that the editorial board will meet to consider the matter at the June meeting of the Association.

COUNCIL ON PHARMACY AND CHEMISTRY

It is not necessary to dilate on the splendid work which is being done by our Council on Pharmacy and Chemistry and by the Chemical Laboratory. A reference to the pages of THE JOURNAL week by week makes it unnecessary to do more than to refer to the matter, and to congratulate ourselves that this splendid work can be carried on under the auspices of our Association.

It is to be regretted that this Council does not have greater cooperation from the leading pharmaceutic houses of the country. While this Council will undoubtedly eventually do more for American pharmaceutic manufacturing concerns, by advancing the standard, thus securing the confidence of the medical profession of the world, it appears that there is an agreement among a few of the firms to ignore the Council; consequently they are not submitting their preparations. On the other hand, practically all of the reliable foreign firms are finding it of decided advantage to have their products passed on by the Council and published in N. N. R. Needless to say, the influence of the Council on all manufacturers is already enormous. To-day they are very careful what they put out and what they say, simply because they know that the medical profession has a body of men competent to criticize, and a journal ready to publish facts without fear or favor. Of course it rests with the profession itself whether this opposition by some firms shall continue. If physicians will refuse to use any proprietary preparation, no matter by whom made, unless it is passed on by the Council, the firms that hold aloof will soon follow the lead of the foreign houses.

Believing the time had come for more constructive work, a year ago the Council appointed a committee on Therapeutic Research and asked for an appropriation of $500. The Trustees granted this request, and again at our last meeting a further sum of $1,500 was appropriated for this work. It is needless to say that the importance of such work cannot be overestimated; it means the application of scientific principles to drug therapy. Some of the investigations now being conducted under the Council's committee are as follows:

1. An investigation of the clinical value of cardiovascular drugs, including digitalis, caffein, strychnin, camphor and the atropin groups. This work is in charge of Dr. David L. Edsall, of the Washington University Medical School, St. Louis.

2. A study of the relative therapeutic effects and toxicity of the natural and synthetic sodium salicylates. This includes (a) a pharmacologic investigation, the results of which have already been published in the *Archives of Internal Medicine;* (b) The chemical work has been carried on in our own laboratory, but not yet published; (c) A clinical investigation, in which the Council has secured the cooperation of some seventy clinicians connected with hospitals and covering nearly the whole country. This work is in charge of Professor Sollmann, of the Western Reserve University, Cleveland.

3. An investigation of the duration of the action of digitalis, to include experiments on animals, and also clinical investigation. This is in charge of Professor Hatcher, of Cornell University Medical College, New York City.

4. A study of the impurities in chloroform, including their origin and effects. This is purely experimental work, in charge of Dr. Worth Hale, Pharmacologist in the Hygienic Laboratory of the U. S. P. H. and M.-H. S., Washington, D. C.

5. A study of intestinal antiseptics. This includes a critical investigation of the literature on the subject, and also experimental and clinical investigation. This is in charge of Dr. Norman M. Harris, of the University of Chicago. Dr. Harris has been conducting this work in the Johns Hopkins Hospital for several months.

6. A study of the action of the organic iodids, their efficiency, freedom from side actions, and their absorption and excretion. This work is in charge of Dr. Capps, of Rush Medical College, Chicago, with the cooperation of Dr. F. MacLean, of the University of Oregon, who is conducting the investigation of the fate of the iodids in the organism.

7. A critical review of the literature of hypophosphites, glycerophosphates, lecithin and phosphorus. This is under the direction of Dr. John Howland, of the Washington University, Medical School, St. Louis.

NOSTRUMS AND QUACKERY

A most important work has developed in connection with, or rather as an offshoot of, the work of the Council on Pharmacy and Chemistry and the Chemical Laboratory. This is the work which is enlightening the public in regard to the frauds connected with patent medicines and quackery in general. This work has broadened out enormously, and is having quite an influence on the public. It requires the entire time of the one in charge, and of three clerical and stenographic assistants. The correspondence with laymen has enormously increased, showing that the public is becoming greatly interested. The important exposés, after appearing in THE JOURNAL, are usually elaborated on, and issued in pamphlet form for circulation among the public. A large amount of this matter has also been gathered into book form and published under the title "Nostrums and Quackery." The first edition of this book was 10,000 copies. These are about gone, and another edition is in preparation. One encouraging fact is that a large number of newspapers have been won over and are copying much of the matter we publish.

BUILDINGS

Our new building furnishes ample and satisfactory facilities for printing and carrying on the various enterprises of the Association. The old building, which will probably not be needed for several years, has been leased from May 1, at an annual rental of $4,764, which is a very satisfactory income from the property.

DIRECTORY

The Third Edition of the American Medical Directory has been issued, and many of you, no doubt, have had an opportunity of examining it. Those of you who have done so will recognize that it is something of which the Association can be proud. It is, without doubt, the most complete and most correct medical directory of the physicians of the United States that has yet been issued. Above all—and this does not appear on the surface—the information it contains is based on official information and is dependable.

As a rule, a directory is a commercial enterprise; hence it is considered legitimate—in fact almost necessary—to insert

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advertisements on the backbone, outside covers, edges and margins of reading pages, as well as to intersperse them in the reading pages. This, of course, is not done with our Directory. Further, other medical directories give a good deal of information—often misleading—regarding an individual, for which he pays either in cash or by subscription for the book. This makes it really an advertisement. In our Directory all are treated alike.

By means of symbols it has been possible to include in small space a large amount of information. In this edition, aside from the ordinary matter which appears in such a directory, there are included symbols to indicate the specialty, if any, the special societies to which an individual belongs, teaching positions, etc. The present book contains 180 pages more than the preceding one, owing to the fact that in the new edition there is a vast amount of additional information. The previous editions were unhandy on account of their size, and we have improved this by using a thin, opaque, imported paper.

As an individual or separate enterprise, our Directory is not an income-producer, but as an adjunct in the Association's general uplift work it is certainly of great value in many ways.

FINANCIAL

Following this report will be found tabulated matter relating to the subscription of THE JOURNAL, etc., followed by the official detailed report of the auditors and treasurer covering the year 1911.

Both the retiring president and the president-elect have attended the special and regular meetings of the Board of Trustees and have in every way manifested the keenest interest in the work of the Association and the welfare of the profession. The magnitude of our aims and efforts increases with the coming years. No medical organization so powerful for good has ever before existed to appeal to the conscience of its votaries in the interest of humanity. The incentive to united professional endeavor was never stronger. In the interest of its own honor, its unselfish devotion to a generous cause, its promise of a greater future, as well as its solicitude for the public weal, we shall not labor or trust in vain.

Respectfully submitted,

W. W. GRANT, Chairman.
C. A. DAUGHERTY,
FRANK J. LUTZ,
C. E. CANTRELL,
W. T. COUNCILMAN,
M. L. HARRIS, Secretary,
PHILIP MARVEL,
PHILIP MILLS JONES,
W. T. SABLES.

Addenda to Trustees' Report

SUBSCRIPTION DEPARTMENT

The regular weekly issue of THE JOURNAL of the American Medical Association, from Jan. 1, 1911, to Dec. 31, 1911, inclusive, 52 issues, was as follows:

January 7	59,098	May 6	54,078
January 14	58,120	May 13	54,571
January 21	57,567	May 20	68,071
January 28	57,470	May 27	54,676
	232,255		231,396
February 4	57,674	June 3	54,489
February 11	57,617	June 10	54,984
February 18	57,696	June 17	55,223
February 25	57,117	June 24	54,551
	230,104		219,247
March 4	57,106	July 1	54,117
March 11	56,619	July 8	54,490
March 18	56,097	July 15	54,428
March 25	56,122	July 22	54,577
		July 29	54,575
	225,944		272,187
April 1	54,166	August 5	54,676
April 8	57,739	August 12	54,604
April 15	53,863	August 19	56,388
April 22	54,179	August 26	54,959
April 29	53,792		
	273,739		220,627
September 2	54,735	November 4	57,759
September 9	54,781	November 11	57,508
September 16	54,580	November 18	57,961
September 23	55,282	November 25	58,522
September 30	55,296		
	274,674		231,750
October 7	55,124	December 2	58,634
October 14	55,220	December 9	58,107
October 21	56,093	December 16	58,514
October 28	56,936	December 23	58,587
		December 30	58,848
	223,373		292,690
Total issue for twelve months			2,927,986
Weekly average			56,307

Percentage of Physicians Receiving The Journal

This table gives the number of physicians (based on the second edition of the American Medical Directory) in the United States, number receiving THE JOURNAL and the approximate percentage in each state. Copies to physicians in the United States Army, United States Navy, Marine-Hospital Service, etc., omitted.

State.	Number Receiving JOURNAL.	Physicians in State 2d A. M. A. Dir.	Approx. per cent. 2d A. M. A. Dir.
Alabama	625	2,287	27.3
Arizona	158	246	64.2
Arkansas	625	2,535	24.6
California	2,664	4,313	61.7
Colorado	879	1,690	51.5
Connecticut	706	1,424	49.5
Delaware	87	220	39.5
District of Columbia	556	1,231	45.1
Florida	359	786	45.6
Georgia	757	2,887	26.4
Idaho	191	343	55.6
Illinois	4,842	9,744	49.6
Indiana	1,789	5,306	33.3
Iowa	1,743	3,624	48.
Kansas	1,181	2,650	44.5
Kentucky	1,018	3,708	27.4
Louisiana	766	1,798	42.6
Maine	417	1,198	34.8
Maryland	990	2,012	49.2
Massachusetts	2,369	5,577	42.4
Michigan	1,748	4,109	42.4
Minnesota	1,289	2,204	58.4
Mississippi	563	2,054	27.4
Missouri	2,201	6,332	35.7
Montana	250	417	59.9
Nebraska	843	1,776	48.
Nevada	91	177	51.4
New Hampshire	288	679	42.4
New Jersey	1,109	2,455	45.1
New Mexico	198	367	52.6
New York	5,097	14,117	36.1
North Carolina	577	1,761	32.7
North Dakota	352	505	66.1
Ohio	2,775	7,838	35.4
Oklahoma	790	2,703	29.1
Oregon	495	782	63.9
Pennsylvania	4,241	11,056	38.3
Rhode Island	335	720	46.5
South Carolina	432	1,141	37.7
South Dakota	347	607	57.1
Tennessee	871	3,303	26.3
Texas	1,634	5,789	28.2
Utah	281	359	78.3
Vermont	215	663	32.4
Virginia	790	2,215	35.6
Washington	844	1,404	60.1
West Virginia	578	1,608	35.9
Wisconsin	1,392	2,518	55.2
Wyoming	106	202	52.4

The following table shows the number of members and subscribers for each year, commencing with 1900:

Year.	Members.	Subscribers.
Jan. 1, 1900	8,445	4,633
Jan. 1, 1901	9,841	8,339
Jan. 1, 1902	11,107	10,795
Jan. 1, 1903	12,353	12,378
Jan. 1, 1904	13,899	14,674
Jan. 1, 1905	17,570	15,698
Jan. 1, 1906	20,826	17,669
Jan. 1, 1907	26,255	20,166
Jan. 1, 1908	29,382	20,880
Jan. 1, 1909	31,999	18,983
Jan. 1, 1910	33,032	19,832
Jan. 1, 1911	33,540	20,504
Jan. 1, 1912	33,250	21,620

During the year, 1911, there were 2,080 names transferred from the subscription to the membership department.

Treasurer's Report

REPORT OF THE TREASURER OF THE AMERICAN MEDICAL ASSOCIATION FOR THE PERIOD FROM JULY 13 TO DEC. 31, 1911

RECEIPTS

July 13, 1911—Assets received from Dr. Frank Billings, former Treasurer—		
Cash balance in First National Bank	$ 9,860.21	
Certificates of deposits in First Trust and Savings Bank	70,000.00	
Bonds per auditor's schedule	40,000.00	
Aug. 14, 1911—Interest on deposit receipt for $40,000.00 dated Dec. 9, 1910	812.50	
Oct. 4, 1911—Interest on bonds	400.00	
Dec. 30, 1911—Interest on bonds	400.00	
Dec. 30, 1911—Interest on checking account	63.86	
		$121,536.57

DISBURSEMENTS

Aug. 14, 1911—To check to editor and general manager	$10,000.00	
Oct. 11, 1911—To check to editor and general manager	10,000.00	
		$ 20,000.00
Dec. 30, 1911—Balance:		
Bonds per schedule	$40,000.00	
Certificates of deposits	60,000.00	
Checking account	1,536.57	
	101,536.57	
		$121,536.57

W. A. PUSEY,
Treasurer.

Auditor's Report

MARWICK, MITCHELL, PEAT & CO., CHARTERED ACCOUNTANTS
115 SOUTH LA SALLE STREET

CHICAGO, Jan. 30, 1912.

To the Board of Trustees of the American Medical Association, Chicago, Ill.

Dear Sirs:

In accordance with your instructions, we have audited the accounts of the American Medical Association for the year ended Dec. 31, 1911, on which we now submit our report, together with the following statements:

Exhibits
- "A" Balance Sheet as at Dec. 31, 1911.
- "B" Income Account for the year ended Dec. 31, 1911.

Schedules
- "1" Bonds as at Dec. 31, 1911.
- "2" Journal Publication Expenses for the year ended Dec. 31, 1911.
- "3" General Expenses for the year ended Dec. 31, 1911.
- "4" Provision for Depreciation for the year ended Dec. 31, 1911.
- "5" Association Expenditure for the year ended Dec. 31, 1911.

We examined the securities representing the investments of the Association and counted the cash on hand. The cash in banks was verified by certificates from the bankers.

The disbursements were vouched and found in order, and a satisfactory test of the revenue of the Association was made.

The balance sheet now submitted is, in our opinion, a full and fair statement of the financial position of the Association as at Dec. 31, 1911, and as shown by the books, subject to the qualification that no provision has been set aside for accrued taxes, and subscriptions and memberships paid in advance, which are partially offset by unpaid subscriptions and memberships earned but not included in the accounts.

The following is a comparative condensed balance sheet as at Dec. 31, 1910 and 1911:

	—December 31—			
Assets:	1911	1910	Increase	Decrease
Property and Plant	$352,345.40	$288,833.66	$63,511.74	
Biographical Information		1,546.83		1,546.83
Investments	99,063.75	94,231.88	4,831.87	
Current and Working	43,912.91	64,948.87		21,035.96
Prepaid Accounts	16,437.03	1,072.32	15,364.71	
Total Assets	$511,759.09	$450,633.56	$61,125.53	
Liabilities	9,414.39	2,104.18	7,310.21	
Surplus	$502,344.70	$448,529.38	$53,815.32	

The increase in surplus, $53,815.32, represents the net income for the year under review, particulars of which are recorded in Exhibit "B."

During the calendar year 1911 depreciation aggregating $19,398.02 has been written off the property accounts. Of this, $17,371.77 is applicable to the new buildings and machinery, plant, etc., while the balance, $2,026.25, is on the old building, not now used in connection with the operation of the business.

The expenses of the year just closed include $12,500.00 in respect of the cost of issuing the third or 1912 edition of the Directory.

The City of Chicago 4 per cent. school bonds due in 1911 have been redeemed at par, namely, $14,000.00. The difference between par and cost value, viz., $1,168.13, is entered in the income account, Exhibit "B."

EXHIBIT "A."

BALANCE SHEET AS AT DEC. 31, 1911.

ASSETS

Property and Plant:			
Real Estate and Buildings			$264,312.59
Machinery			62,181.47
Type and Metal			9,796.30
Furniture and Fixtures			13,649.13
Laboratory			1,220.30
Library			1,185.61
Total Property and Plant			$352,345.40
Investments:			
Bonds at Cost ("Schedule "1")		$39,063.75	
Certificates of Deposit		60,000.00	
Total Investments			$99,063.75
Current and Working Assets:			
Material and Supplies as per Inventory		11,849.71	
Accounts Receivable:			
Advertising	$19,765.30		
Reprints	1,069.17		
Jobbing and Miscellaneous	2,346.42		
		23,180.89	
Bills Receivable		245.31	
Cash in Bank and on Hand:			
The First National Bank of Chicago	$ 1,536.57		
Continental and Commercial National Bank of Chicago	5,206.30		
Cash on Hand	1,844.13		
Office Fund	50.00		
		8,637.00	
Total Current and Working Assets			43,912.91
Prepaid Accounts:			
Insurance		$ 1,352.59	
Atlantic City 1912 Session		38.00	
Unissued Publications		15,046.44	
Total Prepaid Accounts			16,437.03
Total			$511,759.09

LIABILITIES

Miscellaneous Accounts Payable	$	7,621.91
Advance Payments on Publications		1,792.48
Surplus:		
As at Dec. 31, 1910	$448,529.38	
Net Income for Year ended Dec. 31, 1911	53,815.32	
		502,344.70
Total		$511,759.09

EXHIBIT "B"

INCOME ACCOUNT FOR THE YEAR ENDED DEC. 31, 1911

Revenue:		
Membership Dues		$ 36,740.39
Journal Subscriptions		232,235.48
Journal Advertising		177,955.61
Profit Derived from:		
Jobbing		3,636.74
Books		1,910.48
Reprints		3,502.39
Buttons		67.93
Miscellaneous Sales, etc.		8,456.77
Gross Revenue		$459,505.79
Expenses:		
Journal Publication Expenses (Schedule "2")	$197,977.77	
General Expenses (Schedule "3")	121,660.74	
1911 Session Account	4,857.61	
Provision for Depreciation (Schedule "4")	19,398.02	
		343,894.14
Net Revenue		$115,611.65
Other Income:		
Interest:		
On Bonds	$ 1,600.00	
On Treasurer's Account	1,068.10	
On Bank Balances	432.76	
	$ 3,100.86	
Loss on Bad and Doubtful Accounts and Notes less Recoveries	132.10	
		$2,968.76
Gross Income		$118,580.41
Deductions from Income:		
Association Expenditures (Schedule "5")	$ 48,190.20	
Biographical Index	2,906.76	
Difference between par value and cost price of City of Chicago 4 per cent. School Bonds	1,168.13	
Third edition of Directory, proportion of expense charged off	12,500.00	
		64,765.09
Net Income		$ 53,815.32

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SCHEDULE "1"

BONDS AS AT DEC. 31, 1911

No.	DESCRIPTION AND PARTICULARS	PAR VALUE	COST
5	Atchison, Topeka & Santa Fe Railway Co. 4 per cent. 100-year gold bonds...	$ 5,000.00	$ 4,988.75
5	Erie Railroad Co. 4 per cent. 100-year gold bonds	5,000.00	4,932.50
5	Baltimore & Ohio Railway Co. 4 per cent. first mortgage	5,000.00	5,032.50
5	Union Pacific Railroad Co. 4 per cent. first mortgage	5,000.00	5,207.50
5	Reading Co. 4 per cent. general mortgage.	5,000.00	4,870.00
5	Reading Co. and the Philadelphia & Reading Coal & Iron Co. 4 per cent. general mortgage, par value $1,000.00 each, at 94½	5,000.00	4,732.50
5	Atchison, Topeka & Santa Fe Railway Co. 4 per cent. first mortgage bonds, payable April and October, principal due 1995, Nos. 32785, 35162, 40517, 40515 and 40516, par value $1,000.00 each, at 90½	5,000.00	4,532.50
5	Baltimore & Ohio Railway Co. 4 per cent first mortgage bonds, payable April and October, principal due 1948, Nos. 53591, 53594, 53593, 34086 and 34087, par value $1,000.00 each, at 95.	5,000.00	4,767.50
	Total	$40,000.00	$39,063.75

SCHEDULE "2"

JOURNAL PUBLICATION EXPENSES FOR THE YEAR ENDED DEC. 31, 1911

Wages		$ 84,012.10
Editorials, News and Reporting		9,017.99
Materials and Supplies:		
Paper	$ 93,716.41	
Ink	2,767.03	
Electrotypes	3,444.08	
Binding	215.73	
Miscellaneous Supplies	4,604.43	
		104,947.68
Total		$197,977.77

SCHEDULE "3"

GENERAL EXPENSES FOR THE YEAR ENDED DEC. 31, 1911

Salaries		$ 45,871.58
Postage:		
JOURNAL—Second Class	$ 22,435.81	
General	12,417.86	
		34,853.67
Commissions:		
JOURNAL	$ 7,496.47	
Buttons	59.28	
		7,555.75
Plant:		
Repairs and Renewals	$ 4,092.46	
Power	3,258.51	
Light	1,234.20	
Fuel	1,603.41	
Building Maintenance	1,112.92	
Supplies	3,207.54	
		14,509.04
Insurance and Taxes		3,335.55
Discount		3,458.54
Collection Commission		1,627.11
Expenses, Cartage		1,003.21
Agents' Salaries		1,185.75
Exchange		1,387.58
Legal		2,249.95
Office Supplies		565.60
Telephone and Telegraph		787.91
Reprints		161.98
Miscellaneous		2,207.52
Total		$121,660.74

SCHEDULE "4"

PROVISION FOR DEPRECIATION FOR THE YEAR ENDED DEC. 31, 1911

Classification	*Amount*
Buildings	$ 7,995.83
Machinery	6,909.95
Furniture and Fixtures	1,773.31
Type	707.71
Metal	1,446.48
Factory Fixtures	430.05
Laboratory Equipment	135.59
Total	$ 19,398.02

SCHEDULE "5"

ASSOCIATION EXPENDITURE FOR THE YEAR ENDED DEC. 31, 1911

Association	$ 10,349.57
Health and Public Instruction	18,978.61
Pharmacy and Chemistry	9,386.40
Medical Education	6,126.64
Propaganda Literature	3,348.98
Total	$ 48,190.20

We are pleased to report that the records of the Association are maintained in a careful and efficient manner, and we also desire to acknowledge the courtesies extended to us during the course of our examination. Yours truly,

MARWICK, MITCHELL, PEAT & Co.,
Chartered Accountants.

Report of the Judicial Council

To the Members of the House of Delegates of the American Medical Association:

The Judicial Council, elected at the Los Angeles meeting, organized by selecting Dr. Frank Billings, Chicago, as chairman. The by-law defining the Judicial Council (Sec. 4, Chapter IX) directs that this Council shall act under regulations approved by the next ensuing House of Delegates. As there are no methods of procedure and no laws to govern the personal conduct of a member in his relations with other members, the Council offers for the approval of the House the following:

RULES TO GOVERN THE JUDICIAL COUNCIL

1. The Judicial Council shall meet during the annual session of the American Medical Association and at other times at the call of the chairman or upon the written request of three members of the Council.

2. Three members of the Judicial Council shall constitute a quorum.

3. It shall require the affirmative vote of a majority of the Council to decide any question.

4. The time and place of the meetings of the Council shall be announced in each call for a meeting, which call shall be issued at least ten days before the time of the meeting to the members of the Council and the parties to any question pending.

5. In the adjudication of all questions involving the character and status of individuals or societies, the parties implicated must be duly informed of the charges and afforded an opportunity for defense.

6. No mere hypothetical question asking for expression of opinion shall be considered by the Council and no question of any character shall be considered until such question is referred to the Council in accordance with the rules adopted for its procedure.

METHODS OF PROCEDURE

1. In all cases in which the Council has original jurisdiction, questions must be stated in writing whenever they are submitted by action of the House of Delegates or by any of the constituent state associations.

2. In all cases in which the Council has appellate jurisdiction, action must be originated by written appeal made by the individual or organization aggrieved.

3. Documentary evidence in printed or typewritten form must be presented to the Secretary of the Council with a copy of the complaint.

4. The Judicial Council shall set a time for the hearing of the cases that are referred to the Council and shall give notice to the prosecutor and to the defendant of the time and place at which the hearing is to be held. Such notice shall be mailed to both parties to the controversy at their last known address not less than ten days before the date set for the hearing, and no hearing shall be held without this notice unless this condition be waived by both the prosecution and defense.

5. The prosecutor and the defendant, or either of them may be represented before the Judicial Council by any member of the organized medical profession included in the American Medical Association.

6. The attendance at all hearings of cases shall be limited to the members of the Judicial Council, the secretary of the Council, the two principals and their representatives and the witnesses called in the case, provided, however, that at the request of the accused, the Judicial Council, at its discretion, may hold a public hearing. Should either party to the controversy fail to appear in person or to be represented by a member of the Association at the time and place regularly set for the hearing, the Judicial Council shall, at its discretion, continue the case, quash the indictment, or render a decision.

The Judicial Council approves the method of procedure for transferring membership from one component society to another, including the "member's transfer card," as outlined by the Committee on Uniform Regulation of Membership (page 1811), and recommends that these be approved by this House

as the procedure for bringing before the Judicial Council questions relating to the transfer of membership from one component society to another, and for filing complaints by a member of one component society against a member of another component society.

The Judicial Council recommends that Sec. 4, Chapter I of the by-laws, "Effect on Membership of Removal to Another State" be amended by substituting for all that follows the title of the section, the following:

"A member who changes the location at which he practices medicine from the state through whose constituent association he holds membership in the American Medical Association to another state in which there is a constituent association, is eligible to membership in the component society of his new location upon the presentation of a transfer card and an official statement that his dues have been paid in full in the society in which he holds membership. He shall forfeit his membership in the American Medical Association one year after such change of location, unless he becomes a member of the constituent association of the state to which he has moved. Provided, however, that if the component society into whose territory such member has moved shall refuse him membership, the member shall be privileged to appeal to the Judicial Council of this Association to determine whether or not he be guilty of any act that warrants the enforcement of the provisions of this section. Pending the decision of such appeal, he shall retain his membership in the American Medical Association through his original state association. And provided further, that the term, 'the practice of medicine' throughout these by-laws shall be held to mean the offering of service or counsel for the relief of those suffering from abnormal physical or mental conditions."

The Judicial Council further recommends that the second paragraph of Sec. 2, Chapter I of the by-laws be amended by substituting for the present paragraph, the following:

"Commissioned medical officers of the United States Army, United States Navy, and the United States Public Health and Marine-Hospital Service shall be members of this Association so long as they are engaged actively in their respective service and thereafter if they have been retired on account of age or physical disability. These members shall not be required to pay dues and shall not receive THE JOURNAL of the American Medical Association except by personal subscription."

As has been stated, there are no laws approved by the Association under which an aggrieved member may bring action against the member through whose acts he suffers. The Judicial Council offers the revision of the Principles of Medical Ethics appended to this report for adoption by this House and suggests that Sec. 3, Chapter I of the by-laws be amended by adding to the section:

"Furthermore, membership in this Association shall be conditioned on a member conducting himself in accordance with the Principles of Medical Ethics of the Association."

The Judicial Council specially recommends to the House of Delegates that laws be enacted by the Association condemning the secret division of fees and the giving of commissions; also, laws for the proper control of contract practice, and further, that the House of Delegates requests that similar laws be enacted by the several state associations.

Finally, the Judicial Council desires to call the attention of the House of Delegates to the peculiar position in which it finds itself under the by-law that defines the scope of the Council. The Council feels that it is a mistake to have executive duties joined to judicial; that the highest service the Council can render the Association is in the capacity of a judiciary and that the best results demand that the Council be relieved of all activities which may cause the justice of its findings as a court to be honestly questioned. The Council, therefore, prays the House of Delegates to amend Sec. 4, Chapter IX of the by-laws by striking out the last sentence:

"The Judicial Council may investigate professional conditions and all matters pertaining to the relations of physicians to one another and to the public and shall make such recommendations to the House of Delegates and the constituent associations as it deems necessary."

Respectfully submitted,

FRANK BILLINGS, Chairman,
A. B. COOKE,
ALEXANDER LAMBERT,
JAMES E. MOORE,
HUBERT WORK,
ALEXANDER R. CRAIG, Secretary.

PRINCIPLES OF MEDICAL ETHICS

A PROPOSED REVISION

CHAPTER I

The Duties of Physicians to Their Patients

THE PHYSICIAN'S RESPONSIBILITY

SECTION 1.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

SEC. 2.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician, and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

SEC. 3.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

SEC. 4.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

CHAPTER II

The Duties of Physicians to Each Other and to the Profession at Large

ARTICLE I.—DUTIES TO THE PROFESSION

SECTION 1.—The obligation assumed on entering the profession requires the physician to comport himself as a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thraldom is to take away all liberty from one's actions and thought." (Nicon, father of Galen.)

SEC. 2.—In order that the dignity and honor of the medical profession may be upheld, its

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standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

SEC. 3.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

SEC. 4.—Solicitation of patients by circulars or advertisements, or by personal communications or interviews, not warranted by personal relations, is unprofessional. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, as by furnishing or inspiring newspaper comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs or offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

SEC. 5.—It is unprofessional, for personal profit, to hold patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients.

SEC. 6.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

SEC. 7.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

SECTION 1.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

SEC. 2.—When a physician from a distance is called on to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

SEC. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

ARTICLE III.—DUTIES OF PHYSICIANS IN CONSULTATIONS

SECTION 1.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultation.

SEC. 2.—In every consultation, the benefit to be derived by the patient is of first importance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

SEC. 3.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal, to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

SEC. 4.—When a patient is sent to one specially skilled in the care of the condition from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

SEC. 5.—After the physicians called in consultation have completed their investigations of the case, they may meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending, or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

SEC. 6.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

SEC. 7.—Should the attending physician and the consultant find it impossible to agree in their views of a case, another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case to the patient, or his next friend, in the presence of the physician in charge.

SEC. 8.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness except with the consent of the physician who was in charge at the time of the consultation.

ARTICLE IV.—DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE

SECTION 1.—The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician.

SEC. 2.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient.

SEC. 3.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

SEC. 4.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

SEC. 5.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

SEC. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish someone other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

SEC. 7.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

SEC. 8.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

SEC. 9.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

ARTICLE V.—DIFFERENCES BETWEEN PHYSICIANS

SECTION 1.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association.

ARTICLE VI.—COMPENSATION

SECTION 1.—The poverty of a patient, the mutual professional obligation of physicians and certain public duties should command the gratuitous services of a physician. A physician should also give his services to a selected group of eleemosynary institutions, but institutions endowed by the public, or by the rich, or by societies, and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes should be accorded no such privileges.

SEC. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

SEC. 3.—It is not advisable for a county medical society to establish a fee bill; when, however, as is frequently the case, the physicians in a town or community agree upon the minimum fee to be accepted from their patients as a return for their services, honorable conduct demands adherence to this agreement.

SEC. 4.—It is detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or to receive a commission or to divide a fee for medical advice or sur-

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gical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient.

CHAPTER III

The Duties of the Profession to the Public

SECTION 1.—Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

SEC. 2.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations; on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic prevails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk to his own health or life or to financial return. At all times, it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

SEC. 3.—Physicians should warn the public against the devices practiced and the false pretensions made by charlatans which may cause injury to health and loss of life.

SEC. 4.—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians.

CONCLUSION

While the foregoing statements express in a general way the duty of the physician to his patients, to other members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public, and fellow practitioner should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

Report of the Council on Medical Education

To the Members of the House of Delegates of the American Medical Association:

I. MEDICAL COLLEGES

Two years ago, following the completion of the second tour of inspection of the medical colleges of the United States and Canada by the Council on Medical Education, the 143 institutions were graded on a civil service basis, and divided into classes A, B and C. Colleges considered acceptable were listed in Class A; colleges needing certain definite improvements were placed in Class B, and colleges which needed a complete reorganization to make them acceptable were placed in Class C.

Including the Canada schools, 78 colleges were listed in Class A, and of these 68, including 4 Canadian and 2 negro schools, gave the complete four-year medical course, and 10 gave, in an acceptable manner, only the first two years in medicine. In Class B there were 33 medical schools, including 3 Canadian and 1 negro colleges, all giving the complete four-year medical course leading to the M.D. degree. In Class C there were 32 medical schools, including 1 Canadian and 4 negro schools.

TABLE 1.—CLASSIFICATION OF COLLEGES

Colleges	A	B	C	Totals
Giving the four-year course:				
In the United States	62	29	27	118
For colored race	2	1	4	7
In Canada	4	3	1	8
Giving first two years only	10	..	..	10
Totals	78	33	32	143

The complete list so classified was read to the House of Delegates June 6, 1910, was included in the report of the Reference Committee, was adopted and published in the regular minutes of the House of Delegates. Thus, for the first time in the history of medical education, there was published a complete classified list of all the medical colleges in the United States and Canada. The beneficial results of the publication of this classification are difficult to calculate. Over 5,000 reprints of the report have already been sent out and numerous requests for the pamphlet continue to come in. Through this classification prospective the medical student has a means of knowing the character of the college he is about to enter.

Since the report was published 19 more medical colleges have been closed by merger or otherwise, making a total of 56 which have been closed since the Council's first classification was reported in 1907:

TABLE 2.—COLLEGES CLOSED SINCE 1907

Year	Class A		Class B		Class C		Totals		Total Closed
	Merged	Extinct	Mg.	Ext.	Mg.	Ext.	Mg.	Ext.	
1907	3	..	3	1	..	3	6	4	10
1908	2	..	2	..	1	4	5	4	9
1909	3	1	2	..	..	7	5	8	13
1910	1	..	3	..	3	6	7	6	13
1911	1	1	3	..	1	5	5	6	11
	10	2	13	1	5	25	28	28	56

Of these 53 colleges 37 were closed during the interim between the Council's first classification and the publication of the second, and 16 have been closed in the last two years.

THE THIRD INSPECTION

In accordance with the instructions from this body the Council has continued the work of inspecting medical colleges and the third tour has just been completed. As a standard of measurement during this inspection the Council was guided by the "Outline of the Essentials of an Acceptable Medical College," which was prepared during the second tour of inspection and reported to the House of Delegates in June, 1910. As stated at that time, after omitting a number of utterly worthless institutions, this outline represented, in the majority of points, a line considerably below the average of conditions existing at that time in all the medical colleges of the United States and Canada:

OUTLINE OF THE ESSENTIALS OF AN ACCEPTABLE MEDICAL COLLEGE

1. A strict enforcement of all standards and requirements, the college itself to be held responsible for any instances where they are not enforced.

2. A requirement for admission of at least a four-year high-school education superimposed on eight years of grammar school work, or the actual equivalent education, this to consist of 14 units as defined by the College Entrance Examination Board and required by the Carnegie Foundation for the Advancement of Teaching. (See schedule, page 103).

3. As soon as conditions warrant, the minimum requirement for admission should be enlarged to include at least one year's college work each in physics, chemistry and biology and a reading knowledge of at least one modern language, preferably German or French.

SCHEDULE OF SUBJECTS OFFERED IN ACADEMIC AND SECONDARY SCHOOLS, CREDITS IN WHICH ARE ACCEPTABLE FOR ENTRANCE TO MEDICAL COLLEGES

BASED ON THE REQUIREMENTS OF THE COLLEGE ENTRANCE EXAMINATION BOARD

SUBJECTS.	UNITS.	REQUIRED.	ELECTIVE.
ENGLISH			
READING AND PRACTICE	2	2	...
Study and Practice	1	...	1
MATHEMATICS			
ALGEBRA, TO QUADRATICS	1	1	...
ALGEBRA (Quadratic Equations, Binomial Theorem and Progressions)	½	...	½
PLANE GEOMETRY	1	1	...
Solid Geometry	½	...	½
Trigonometry	½	...	½
LATIN			
GRAMMAR AND COMPOSITION	1	1	...
CAESAR	1	1	4
Cicero	1	...	1
Virgil	1	...	1
Cornelius Nepos	1	...	1
Greek			
Grammar and Composition	1	*	1
Xenophon	1	...	1
Homer	1	...	1
German			
Elementary	2	**	2
Intermediate	1	...	1
French			
Elementary	2	**	2
Intermediate	1	...	1
Spanish			
Elementary	2	**	2
HISTORY			
UNITED STATES HISTORY	1	1	...
Greek and Roman History	1	...	1
Medieval and Modern	1	...	1
English	1	...	1
SCIENCE †			
Botany or Zoology, each	½	...	½
or Biology	1	...	1
Chemistry	1	...	1
Physics	1	1	...
Physiography	½	...	½
Physiology	½	...	½
Drawing	1	...	1
Music			
Appreciation	1	...	1
Harmony	1	...	1
Total	34	8	26

A *unit* is the credit value of 36 weeks' work of 5 recitation periods per week, each recitation period to be of not less than 40 minutes.

Required Branches: Of the 14 units of high school work it is suggested that the subjects in capitals aggregating 8 units should be required. Other work to the amount of at least 6 units may be made up from any of the other subjects of the above schedule.

* Two units of Greek may be substituted for the two required units of Latin.

** A reading knowledge of German, French or other modern language is recommended in the high school courses of students contemplating the study of medicine without higher preliminary qualifications.

† It is understood that each science course must include laboratory work.

4. A requirement that students be in actual attendance in the college within the first week of each annual session and thereafter.

5. That actual attendance at classes be insisted on except for good cause, such as for sickness, and that no credit be given under any circumstances for less than 80 per cent. of attendance on each course.

6. That advanced standing be granted only to students of other acceptable colleges and that in granting advanced standing there shall be no discrimination against the college's full-course students.

7. Careful and intelligent supervision of the entire school by a dean or other executive officer who holds, and has sufficient authority to carry out, fair ideals of medical education as interpreted by modern demands.

8. A good system of records showing conveniently the credentials, attendance, grades and accounts of the students.

9. A fully graded course covering four years of at least 30 weeks each, exclusive of holidays, and at least 30 hours per week of actual work; this course should be clearly set forth in a carefully prepared and printed schedule of lectures and classes.

10. Two years of work consisting largely of laboratory work in thoroughly equipped laboratories in anatomy, histology, embryology, physiology, chemistry (inorganic, organic and physiologic), bacteriology, pathology, pharmacology, therapeutics and clinical diagnosis.

11. Two years of clinical work largely in hospitals and dispensaries, with thorough courses in internal medicine (including physical diagnosis, pediatrics, nervous and mental diseases), surgery (including surgical anatomy and operative surgery on the cadaver), obstetrics, gynecology, laryngology, rhinology, ophthalmology, otology, dermatology, hygiene and medical jurisprudence.

12. As soon as conditions warrant the requirements for graduation should be enlarged to include at least twelve months of continuous work as an intern in an acceptable hospital.

13. At least six expert, thoroughly trained instructors in the laboratory branches, salaried so they may devote their entire time to instruction and to that research without which they cannot well keep up with the rapid progress being made in their subjects. These instructors should rank sufficiently high to have some voice in the conduct of the college. There should also be a sufficient number of assistants in each department to look after the less important details.

14. The medical teaching should be of at least the same degree of excellence as obtains in our recognized liberal arts colleges and technical schools.

15. The members of the faculty, with a few allowable exceptions, should be graduates of institutions recognized as medical colleges and should have had a training in all departments of medicine. They should be appointed because of their ability as teachers and not because they happen to be on the attending staff of some hospital or for other like reasons.

16. The college should own or entirely control a hospital in order that students may come into close and extended contact with patients under the supervision of the attending staff. The hospital should have a sufficiently large number of patients to permit the student to see and study the common varieties of surgical and medical cases as well as a fair number in each of the specialties.

17. The college should have easily accessible hospital facilities of a daily average of not less than 200 patients which can be utilized for clinical teaching (for senior classes of 100 students or less), these patients to represent in fair proportion all departments of medicine.

18. The college should have additional hospital facilities for children's diseases, contagious diseases and nervous and mental diseases.

19. Facilities for at least five maternity cases for each senior student, who should have actual charge of these cases under the supervision of the attending physician.

20. Facilities for at least 30 autopsies during each college session (for senior classes of 100 students or less).

21. A dispensary, or out-patient department, under the control of the college, the attendance to be a daily average of 60 cases (for senior classes of 100 students or less), the patients to be carefully classified, good histories and records of the patients to be kept and the material to be well used.

22. The college should have a working medical library to include the more modern text and reference books and 10 or more leading medical periodicals; the library room to be easily accessible to students during all or the greater part of the day; to have suitable tables and chairs and to have an attendant in charge.

23. A working medical museum having its various anatomic, embryologic, pathologic and other specimens carefully prepared, labeled and indexed so that any specimen may be easily found and employed for teaching purposes.

24. A supply of such useful auxiliary apparatus as a stereopticon, a reflectoscope, carefully prepared charts, embryologic or other models, manikins, dummies for use in bandaging, a Roentgen ray or other apparatus now so generally used in medical teaching.

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25. The college should show evidences of reasonably modern methods in all departments and evidences that the equipment and facilities are being intelligently used in the training of medical students.

26. A statement in which the college's requirements for admission, tuition, time of attendance on the classes, sessions and graduation are clearly set forth should be given, together with complete lists of its matriculants and latest graduating class in regular annual catalogues or announcements.

Definitions of a Medical College and a Medical School†*

"An institution to be ranked as a medical college must have at least six (6) professors giving their entire time to medical teaching, a graded course of four full years of college grade in medicine, and must require for admission not less than the usual four years of academic or high-school preparation, or its equivalent, in addition to the preacademic or grammar school studies."

"By a medical school as differentiated from a medical college is meant a part of a university requiring for admission the equivalent of two years of collegiate work and which offers instruction of not less than two years' duration, leading to the degree of Doctor of Medicine."

GRADING OF MEDICAL COLLEGES

In a similar manner as in the previous classification, the colleges were rated on a civil service basis on a scale of 1,000 points. The data relating to each college were grouped under ten general heads in such manner that the groups would have as nearly equal weight as possible, each group allowing a possible 100 points (10 per cent.) of a possible 1,000 points (100 per cent.). The ten heads under which the data were arranged are as follows:

1. Showing of graduates before state boards and other evidences of the training received by the graduate.
2. Enforcement of a satisfactory preliminary educational requirement and the granting of advanced standing.
3. Character of curriculum, grading of course, length of session, time allowed for matriculation and supervision.
4. Medical school buildings; light, heat, ventilation, cleanliness.
5. Laboratory facilities and instruction.
6. Dispensary facilities and instruction.
7. Hospital facilities and instructions, maternity work, autopsies, specialties.
8. Faculty, number and qualifications of trained teachers, all-time instructors, and assistants especially of the laboratory branches, and extent of research work.
9. Extent to which the school is conducted for properly teaching the science of medicine rather than for the profit of the faculty directly or indirectly.
10. Possession and use made of libraries, museums, charts, stereopticons, etc.

Colleges receiving a rating of 70 per cent. or above in each and all of the ten divisions of data are included in Class A; colleges receiving an average of 70 per cent. or above, but which receive a rating below 70 per cent. in one, two or three of the divisions are included in Class A minus; colleges receiving an average of between 50 and 70 per cent. and colleges having an average of above 70 per cent., but which receive a rating below 70 per cent. in more than three of the divisions above named, are included in Class B and colleges receiving less than 50 per cent. are included in Class C. In other words, Class A colleges are those which are acceptable; Class A minus, those which are lacking in certain respects, but which are otherwise acceptable; Class B, those which, under their present organization, might be made acceptable by general improvements, and Class C, those which require a complete reorganization to make them acceptable. On the basis of this third inspection the Council now presents for your consideration a revised classification of the medical colleges of the United States and Canada with the recommendation that it be published.

COUNCIL'S ACTION NOT HASTY

Following the first tour of inspection four years ago, the Council was criticized for not publishing outright a classification of medical colleges. None was published at that time, however, because the Council desired to give a number of colleges, which were contemplating improvements, the opportunity to make good. The delay has been more than justified. Many colleges have secured additional facilities, numerous mergers have been brought about and, on the whole, the situation has greatly improved. The general conditions, as revealed by the first inspection, however, were given the widest possible publicity so that since two years ago pleas of ignorance in regard to the demands of modern medicine are unworthy of consideration and the regular publication of frequently revised classifications is highly essential in order to secure the needed improvements of medical education.

PERSISTENT EFFORT NECESSARY

That persistent, continuous work is needed in the investigation and reporting on medical schools is evidenced by the following facts:

(a) At least 45 medical colleges are still adhering to less than a four-year high school education as a minimum of preliminary education.

(b) Several of these schools make use of questionable makeshifts in the effort to enroll larger numbers of students—and thereby to add to the income of the school.

(c) Most of these 45 schools allow advanced standing for work done in other inferior colleges.

(d) A score or more of colleges are still being conducted for profit in that they are adding to the college plant—the property of the faculty in each instance—or paying off debts on such college property out of students fees.

(e) Only 33 medical colleges have a reasonably close and mutually advantageous connection with universities. On the other hand, there are 46 which have the word "university" as a part of their titles or which claim to be medical departments of universities and which are misrepresentations in as far as their university connection is more or less vague or entirely lacking.

(f) In at least 56 medical colleges no research work whatever is being carried on.

(g) While this country has 120, or about 40 per cent., of the world's supply of medical schools, only about 30 in this country could compare in any way favorably with the medical schools of the leading nations abroad.

MORE MERGERS NEEDED

It would be a vast improvement if we could reduce our oversupply of medical schools to a smaller number of better-equipped institutions. Toward this end there are several locations where mergers should be made, since two or more medical schools are competing for clinical facilities in local hospitals and as a consequence neither secures adequate advantages. This is particularly true in Atlanta, Dallas, Memphis, Milwaukee and Richmond. A merger of the institutions in these cities would not only give the one stronger institution all the privileges now divided among the separate institutions, but added privileges might also be secured as was the case following the mergers at Louisville, Indianapolis and Cincinnati. Medical education would doubtless be improved if further mergers were brought about also in Baltimore, Boston, Chicago, Philadelphia, St. Louis and Washington.

Better supervision is needed in some of our medical schools which clearly are not making use of the advantages they now have. For example some could secure larger dispensary facilities if that department was better organized. Others could have larger privileges in hospitals if they would make use of them in the proper training of medical students.

MEDICAL RESEARCH

No medical school can be fully alive to the present needs of medical education unless it has the constant inspiration that comes through medical research within the college. How can the school without research know what subjects should be most emphasized in the medical curriculum, or what methods should be employed in teaching? Nevertheless, we have in this country today only 30 medical colleges where active and valuable research is being carried on. In about 30 others some little effort at research is being made by individuals, but the men are handicapped by lack of time, assistants or material, or the college is of too low a standard to receive any benefit from it. In at least 56 medical colleges no research work whatever is being carried on.

THE MODERN MEDICAL SCHOOL

From the research carried on by the Council for the last eight years, it is important to place before the public and the medical profession a statement outlining what is meant by a modern medical school.

The modern medical school should be developed as the medical department of the university and its function will be to turn out well-qualified practitioners of medicine, and to add its quota to the definite knowledge of medical matters. To fulfil these functions the medical school must have (a) well-qualified students, (b) expert teachers, (c) well-equipped laboratories, and (d) ample clinical material.

* This definition of a college is based on that given in the revised ordinances of the State of New York, and which also was adopted by the Carnegie Foundation for the Advancement of Teaching as their standard.

† Based on the definition of the term "school," adopted in 1909 by the Association of American Universities.

MEDICAL STUDENTS

Medical students, in addition to their primary and secondary education, should be required to have completed (a) one or two years devoted to higher physics, chemistry and biology; (b) should complete four years of medical study, and (c) take a year's internship in a good hospital. The council has long been of the opinion that this should represent the minimum requirement for the medical degree in this country. This would enable the student to graduate at about 25 or 26 years of age, whereas the extreme requirements of few of the medical colleges in this country delay the age of graduation to about 28 or 29 years—an extreme which does not prevail in England, France or Germany, which stand high in educational and scientific matters. Thirty years of age is altogether too late in life for the average medical student to complete his course and adapt himself to the development of a practice. Hence the council deplores the tendency of some university medical schools to extend their entrance requirements to three or more years of collegiate work. The highest extreme at the present time should not be more than two years of university science, and even this requirement should be accepted with the understanding that an attempt be made in the near future to save a year somewhere in our primary or secondary school course. The two-year standard has already been quite widely adopted in this country.

The intern year in a hospital should be made a requirement throughout the country by state medical licensing boards within the next two or three years. That this would be a reasonable requirement is evidenced by the fact that there are now in this country at least 2,500 hospitals having twenty-five or more beds each, or having a total of at least 200,000 beds. There is no doubt that internship could be provided in the better portion of these hospitals for every one of the 4,000 senior medical students now enrolled in the medical colleges in this country.

TRAINED TEACHERS

Of great importance in connection with medical education in this country is a system by which specially trained medical teachers and research men in anatomy, physiology, pharmacology and pathology can be secured. At present it is very difficult to secure such teachers.

The chief reason that such work has not attracted high class men is that the medical schools have had no money to pay reasonable salaries. So the means of securing such teachers would be to provide better salaries, if not pensions also—through such agencies as the Carnegie Foundation—thus providing for old age of these teachers and for their families. These places could be made still more attractive if the colleges would supply the professors with a larger number of assistants and better facilities so they would have time and opportunity to carry on research work.

The lack of well-trained medical men has led many of our medical schools to fill positions with men holding the Ph.D., men well trained in their special sciences, but lacking the medical training, and, therefore, lacking the medical point of view. The lack of the medical point of view prevents such teachers from fully understanding the work of the clinical departments and correlating their work with those departments. Since there is so much to learn in a very limited space of time, the subjects of the medical course should be selected and taught by those who have received the complete medical training, and who are thereby better enabled to correlate these subjects with the other branches of the medical course.

CLINICAL TEACHERS

In only a few instances in this country have medical schools placed their clinical professors on definite salaries and limited them in their private practice. The same apparently holds true in Great Britain. The plan adopted by the German universities comes nearest to the ideal. There the clinical professor is chosen because of his scientific ability, receives a fair but moderate salary, and is made to feel that his university and hospital work is of first importance. He usually devotes at least four or five hours each day to his clinical cases, to teaching or to research work. It is recognized as proper and even desirable for him to have some private practice so long as it does not interfere with his university work. He is recognized as the highest authority in his special field, and his services can be secured by the rich as well as the poor.

This private practice keeps the professor in touch with the people and with the medical profession and makes him a more practical teacher. It prevents his forming wrong conclusions and becoming narrow, which might be the case were he confined to his laboratory and hospitals. Furthermore, the income from this private practice attracts and holds high-class men in the clinical chairs.

The clinical professor must be not only a great physician and trained teacher, but he must be competent to carry on, to direct and to stimulate research work. There is no higher type of medical research than scientific clinical research, and every medical school should provide ample means and ample material toward this end. Some of the best pieces of medical research have been along clinical lines, such as Lister's discovery of antiseptic surgery and Kocher's researches in connection with exophthalmic goiter. By removing a part of the thyroid gland Kocher proved that the symptoms of exophthalmic goiter were due to a hypersecretion of that gland—and won for himself the Nobel prize.

ASSOCIATES AND ASSISTANTS

Under the clinical professor should be a number of salaried associates and assistants who would devote their entire time to clinical work, teaching and research. They should be given living salaries, which need not be especially large, since the training they receive could be regarded as compensation of great value, and it is from those who have shown marked ability in this group that selections should be made of clinical professors.

CONTROL BY MEDICAL MEN

The organization of the medical departments of our universities cannot safely be placed in the hands of non-medical trustees or non-medical professors of the scientific department, since the premedical sciences are apt to be emphasized without regard to the medical curriculum as a whole; the laboratory courses are apt to be developed along impractical and undesirable lines, and the needs for the development of the clinical department cannot be fully appreciated. In fact, if medical matters are left entirely in non-medical hands for their adjustment a deplorable disagreement would be apt to arise between university teachers and medicine, similar to what Professor von Müller says exists in Germany between scientific jurisprudence and the practice of law. The reorganization of medical education in this country, therefore, must be made by the men who are most familiar with the facts and needs of the situation—the medical men themselves.

THE TEACHING PLANT

This comprises (a) the laboratories with the necessary equipment and material; (b) the hospitals and dispensaries with the essential equipment and material, and (c) sufficient endowment to carry on the laboratory and clinical work.

1. *The Laboratories.*—Four laboratories, or, better still, four separate buildings are essential; one for anatomy, including embryology and histology; one for physiology, including physiologic chemistry; one for pathology, including bacteriology, and one for pharmacology. To carry on the work of these four laboratories, at a moderate estimate, $40,000 a year would be necessary, and in a large university several times this amount might be required. The most important factor is the man in charge of the department. A strong man with inexpensive building and equipment will accomplish more than a mediocre man with the most elaborate equipment. As to the scheme of organization of, and teaching in, the laboratory departments there seems to be no disagreement.

2. *The Clinical Work.*—The essentials are (a) a modern hospital having for each clinical department a continuous service under the immediate charge of the heads of the department and his assistants; (b) a dispensary, or out-patient service similarly controlled, and (c) for each clinical department, clinical and research laboratories, class-rooms, operating rooms, etc. Comment has already been made in regard to competent clinical professors. These, as in the laboratory courses, constitute the most important factor.

UNIVERSITY VS. PUBLIC HOSPITALS

For the university to build and maintain its own teaching hospital may not be the best step in all instances. It would doubtless be the best for all parties concerned if our great municipal hospitals could be conducted as scientific institutions in charge of the teachers and investigators of our strong university medical schools. This would not only enable those hospitals to fulfil a greater function in the development of thoroughly qualified physicians, but it would also be best for the patients, since they would have the benefit of the best methods of treatment under recognized experts. A campaign of education should be carried on to show our municipal authorities that the hospital will be conducted in the best interests of its patients and the community at large, if at the same time it is fulfilling its function as a great center of

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clinical teaching and research. The fame which is held by the great charity hospital of Vienna could likewise be obtained by the large municipal hospitals of New York, of Chicago and elsewhere. In Chicago the Cook County Hospital now has 2,000 charity patients, and with its new building to cost $8,000,000, to be erected in a short time, will have 3,000 beds. Think of the amount of good that could be accomplished if this great institution was developed along modern lines, in charge of trained teachers with proper facilities for teaching and research! Think how much better care and treatment the patients of the hospital would receive and the greater benefit it would be to the community at large through the better training given to its medical men. This could be done with a full recognition of the hospital's first and most important function—that of giving the patient the best medical attention—by providing that no patient should be used for teaching without his or her consent.

The splendid medical clinic of Friedrich Müller in Munich has been developed in a municipal hospital—and the same is true of most of the German clinics—made possible by an arrangement between the municipal authorities and the university authorities, by which the university, with the consent of the municipal authorities, appoints the head of the medical department to the position of attending physician to the hospital. No patient can be used for teaching if he objects. As a matter of fact, most of the patients are glad to be demonstrated and discussed, and less than 10 per cent. object. Although there are a few hospitals conducted by universities, most of the hospitals used as teaching hospitals in Great Britain and the Continent are municipal government or semi-public institutions, which are affiliated with medical departments. These affiliations are made and continued because the hospital and the medical school find it to their mutual advantage.

The same state of affairs should be brought about in this country, and, in fact, a start has already been made. At Cincinnati the large municipal hospital has been placed in charge of the clinical teachers of the University of Cincinnati; in St. Louis, the Washington University has made a close affiliation with the new Barnes Hospital; in Boston, Harvard has made an affiliation with the Peter Brigham and several other special hospitals; in New York, Columbia University and the Presbyterian Hospital have established similar relations; in Cleveland, Western Reserve University has formed a combination with the Lakeside Hospital; in Chicago, Rush Medical College has had for a number of years the medical control of the Presbyterian Hospital, and recently has made similar contracts and arrangements with the Children's Memorial Hospital, the Home for Destitute Crippled Children and the Hospital for Infectious Diseases.

The best plan is to make a definite contract between the medical school and the hospital, giving the medical school the right to nominate the members of the attending staff, with the understanding also that, when a man severs his connection with the medical school, by virtue of that act he resigns from his hospital appointment. Further, the medical school should agree to provide for the scientific, medical and surgical care of the patients and control the clinical teaching, with the proviso that no patient who objects shall be used for clinical instruction.

We do not desire to belittle in any way the value of the university-conducted hospital. We feel, however, that the charity hospital needs the services of the clinical teachers of the medical school; that the medical school needs the great charity hospital in order to carry on its clinical teaching and research work, and that the interests of the entire community are best subserved by such a combination

In this combination between hospital and medical school the hospital should provide the means for conducting the hospital proper. The medical school should pay the salaries of the attending medical men and provide the necessary facilities for teaching and research. There should be that sort of division of labor, that sort of team work, which will make the combination of mutual benefit, and will result in both parties to the contract regarding each other with mutual admiration and respect.

THE TASKS OF THE FUTURE

Therefore, in the reorganization of medical education in this country the medical profession must accomplish three great tasks: 1. It must urge the state licensing board to require that amount of medical training which is necessary before the medical student can safely begin independent practice, and this requirement should be put into effect within the next few years.

2. The second great task is to secure through our universities and from other sources sufficient funds to place the medical schools on a full university basis, and at the same time to reorganize our medical departments on the general lines of the German universities so as to develop the trained teachers which are so much needed. In this reorganization we must secure state aid and private endowment and the support and cooperation of the university officers and trustees.

3. The third great task is to secure the proper affiliation between our great charity hospitals and our medical schools. By a campaign of education we must secure the cooperation of the governing bodies of these hospitals; we must convince them that the best interests of the patients and of the entire community can be best conserved by such a relationship; we must convince them of the great importance of developing the teaching and research functions of the hospital.

These three tasks require the active cooperation and support of three different classes of men: the state boards, the university authorities and the governing bodies of hospitals. The initiative in these great movements must come from the medical profession itself and results can be obtained by an active, aggressive campaign of education.

GREAT PROGRESS MADE

The preceding statements are made to point out the need of continuous, persistent effort on the part of the American Medical Association and should in no way belittle the great progress made in recent years. In fact, as shown in our report last year, very rapid progress has been made since 1904 when the American Medical Association created its permanent committee on medical education. Since that time the colleges have been reduced from 166 to 120 and, as shown in Table 2, this reduction has been brought about chiefly by the closing of inferior schools and by mergers, so that the colleges which remain present a much higher average of excellence. The following list shows how decidedly entrance standards have been raised. Also sessions have been lengthened, better teachers have been employed, new buildings have been erected, better endowments have been secured, new laboratories have been provided, better equipment furnished and, particularly during the past year, much closer relations have been established with hospitals, and larger clinical privileges secured for medical students.

PRELIMINARY EDUCATION

Since our last report five more colleges have entered on the requirement of a year or more devoted to physics, chemistry and biology in addition to the four-year high school course, making a total of 46 which are now exacting the higher requirement.

COLLEGES AND STATES HAVING HIGHER REQUIREMENTS

The thirty medical schools which are now requiring as a minimum for entrance two or more years of work in a college of liberal arts in addition to a four-year high school education are as follows:

COLLEGE	BEGUN
Johns Hopkins University, Medical Department	1893
Harvard Medical School	1900
Western Reserve University, Medical Department	1901
University of Chicago, Rush Medical College	1904
University of California, Medical Department	1905
University of Minnesota, College of Medicine and Surgery	1907
University of North Dakota, College of Medicine	1907
University of Wisconsin, College of Medicine	1907
Cornell University Medical College	1908
Wake Forest College, School of Medicine	1908
Leland Stanford Junior University, Department of Medicine	1909
Yale Medical School	1909
University of Kansas, School of Medicine	1909
University of Michigan, College of Medicine	1909
University of Nebraska, College of Medicine	1909
University of South Dakota, College of Medicine	1909
University of Colorado, School of Medicine	1910
Indiana University, School of Medicine*	1910
State University of Iowa, College of Medicine*	1910
State University of Iowa, College of Homeopathic Medicine	1910
Drake University College of Medicine	1910
University of Missouri, Department of Medicine†	1910
Dartmouth Medical School	1910
Columbia University College of Physicians and Surgeons	1910
Syracuse University College of Medicine*	1910
University of Pennsylvania, Medical Department*	1910
University of Utah, Medical Department*	1910
Northwestern University Medical School†	1911
Georgetown University, School of Medicine	1912
Washington University, Medical Department	1912

* One year required for the session of 1909-10.
† One year has been required since 1906.
‡ One year required since the session of 1908-09.

The sixteen following colleges require in addition to a four-year high school course one year of work in college, physics, chemistry and biology:

COLLEGE	IN FORCE
Howard University School of Medicine	1910
Kansas Medical College	1910
Tulane University, Medical Department	1910
St. Louis University School of Medicine	1910
University Medical College, Kansas City	1910
University of North Carolina School of Medicine	1910
Ohio-Miami Medical College, University of Cincinnati*	1910
University of Oregon, Medical Department	1910
University of Texas, Medical Department	1910
University of Virginia, Department of Medicine	1910
Fordham University School of Medicine	1911
University of Pittsburgh, Medical Department	1911
Medical School of Maine	1912
University of Michigan, Homeopathic College	1912
University and Bellevue Hospital Medical College	1912
University of Vermont, College of Medicine	1912

II. STATE LICENSURE

From the fact that forty-seven medical colleges have adopted higher entrance requirements it is interesting to note that nine state examining boards have also adopted preliminary requirements in advance of a four-year high school education. These are as follows:

State Examining Board of	No. of Years Required	Affects Students Matriculating	Affects All Applicants
North Dakota	2	1907-08	1911
South Dakota	1	1907-08	1911
Iowa	2	1907-08	1911
Minnesota	2	1908-09	1912
Colorado	1	1908-09	1912
Colorado	2	1910-11	1914
Connecticut	1	1910-11	1914
Kansas	1	1910-11	1914
Indiana	1	1909-10	1913
Indiana	2	1910-11	1914
Utah	1	1910-11	1914

There are several other states which are contemplating similar increase in their requirements in the near future.

OTHER STATE BOARD ADVANCES

Advancement in the regulations governing the licensing of physicians is necessarily slow owing to the difficulty of securing legislation. That always means an uphill fight against all the forces which are opposed to reasonable standards of education and to proper qualifications for the license to practice medicine. Nevertheless considerable advancement has been made during the past year.

One noteworthy achievement was the securing by Pennsylvania of a new medical practice act providing for a single board—the Bureau of Medical Education and Licensure—displacing the three separate sectarian boards which previously had the work in charge. Another important advance was the securing in Mississippi of an amendment to the medical practice act requiring that every applicant for a license be a graduate of a reputable medical college—leaving only one state in the South, Tennessee, which permits non-graduates to secure the license. In several states advancement in educational requirements have been made. The regular boards of Arkansas and Louisiana have both adopted the four-year or 14-unit high school course as the minimum standard of preliminary education and have adopted methods which will guarantee its enforcement. The Board of Texas during the last few years has been gradually raising its standard until now it is definitely on the 14-unit basis.

STATE BOARD ADVANCES MUCH NEEDED

Much remains to be done, however, in establishing proper safeguards between the people and the stream of incompetent and untrained "doctors" who seek the right to practice. The needs for better legislation and for better methods of examination stand out in greater contrast owing to the rapid advances made in medical education during the last seven or eight years.

HIGHER PRELIMINARY REQUIREMENTS NEEDED

For example, there are still 12 states having no fixed standard of preliminary education and 17 which require less than a four-year high school education. In fact of the 21 states which are avowedly on the four-year high school basis, only 6 or possibly 8 have methods of evaluating credentials which guarantee that every physician licensed actually has had the required training. The general failure to enforce preliminary standards is due chiefly to the unquestioning acceptance of the so-called "equivalent certificates." A routine method of going back of these certificates, as investigation has proved, would show that many if not the majority of these certificates represent much less than the "equivalent" education. Meanwhile in the 21 states referred to there are 12 or 14 low grade medical colleges which could not exist were it not for this failure on the part of state boards to carefully evaluate credentials of preliminary education.

RECOGNITION OF COLLEGES

Six state boards are entirely without authority to refuse recognition to a medical college no matter how worthless it may be, and in 14 other states the authority is divided among two or three boards, or other causes are hindering the use of such authority. There are also six states wherein the authority to safeguard the public against incompetent doctors rests in the care of two or more independent boards. In some of these states a candidate, if he fails before one board, can go to the second, or to the third, and, however incompetent he may be, seldom fails to receive his license.

SUPPORT OF THE LICENSING BOARDS

It is becoming more and more important that our state boards be placed on a different financial basis than at present prevails. Now most boards have to depend entirely on the fees received from applicants. Owing to the overcrowded condition of the profession, to the higher standards of preliminary education and to more effective methods of examination, the numbers of applicants appearing in many of the states are decreasing so that, even if much larger license fees be demanded, the boards will still be without ample funds to enforce the provisions of the practice act. The fee system is thus faulty, in that efforts by the board to adopt higher standards or better methods of examination, tend directly to reduce the number of candidates and to a corresponding degree the income of the board. Is it not about time, therefore, that for each board a state appropriation should be made, generous enough to provide not only for an able executive officer, but also for examinations that would be thorough, for such legal action as may be necessary for the enforcement of the practice act and for a careful system of records? It is pleasing to note that the new Pennsylvania practice act provides for an annual appropriation of $30,000 for the support of the board.

ONE STANDARD FOR ADMISSION TO THE PRACTICE OF MEDICINE

Probably the greatest problem in this country and which has no parallel in any other civilized nation is that due to the existence and recognition of medical sects. Pseudo-medical cults have secured a foothold through a skillful avoidance of the real issue. Each has argued for certain privileges as compared with privileges granted to other schools of medicine. The real issue, however, is that medical practice acts are not intended to protect this or that medical sect but to protect the public against incompetence and fraud. It is, therefore, a question of education and training and not one of this or that sect or method of treatment. Medical legislation should know no class, and provide no special privilege, but should provide that only those who are competent, as measured by a certain definite routine in which all candidates are treated alike, should be permitted to treat human ailments. The practice of medicine is much broader than the giving or the withholding of drugs. Probably every reputable physician could specify hundreds of cases in his practice where to have withheld a drug would have resulted in the death of the patient. The practitioner of medicine, therefore, no matter what methods of treatment he may advocate, should be required to show a sufficient knowledge of diseases, and to have undergone a sufficiently thorough training in the fundamental branches of medicine *to enable him to recognize the disease he is attempting to treat*—that is, he must be able to make a diagnosis—otherwise he should not be considered as qualified to practice medicine. To treat a patient without first obtaining a knowledge of the disorder is pure guess-work and unscientific.

III. FUTURE WORK OF THE COUNCIL

NEXT ANNUAL CONFERENCE

Through the action last year of this body and of the Board of Trustees of the American Medical Association, the Council was enabled to have Mr. Frederic G. Hallett, Secretary of the Examining Board in England, present at our Eighth Annual Conference on Medical Education held last February. Mr. Hallett's report on the methods of conducting the licensing examinations in England was very complete and eminently satisfactory. Rich as it was in suggestions, it will doubtless have splendid results in the bettering of the state licensing

* Will require two years in 1913 and thereafter.

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examinations in this country. So satisfactory, indeed, was the visit of Mr. Hallett, that the Council would earnestly recommend that similar measures be taken in the study of other problems arising during the development of medical education in this country.

THE PROBLEM OF THE CLINICAL YEAR

Probably the most important problem which will come up for discussion at our next conference, is to ascertain the best scheme of reorganizing the clinical years of the medical course, and at the same time developing the best clinical teachers. This part of medical teaching seems to have reached its highest development in Germany where the matter has been given a great deal of study. The Council, therefore, would like to be given authority to invite one of the great German clinicians, such as Professor Friedrich von Müller, to be present at our next conference and explain the German system to the medical educators of this country. By this plan this country will receive benefit from the large experience of those who have developed what apparently comes nearest to the ideal system of clinical teaching.

INVESTIGATION OF HOSPITALS

The next important requirement to demand of applicants for license to practice medicine, is that, in addition to their four years of medical training, they shall have served for a year as an intern in some good hospital. This has already been referred to. Before the requirement is insisted on, however, it is highly important that there be an investigation made of the hospitals of the country so as to ascertain how many of them are satisfactorily equipped to furnish interns with the kind of training needed. With the sanction of the House of Delegates the Council is in position to at once take up this investigation.

THE EXTENSIVE ROUTINE OFFICE WORK

The other lines of work being regularly carried on by the Council are the collection and publication of state licensing board statistics, the collection and publication of statistics regarding medical colleges, students and graduates, keeping in touch with the literature regarding medical education, keeping up-to-date files of the catalogues of the medical colleges of this and other countries, securing the verification of the credentials of those claiming graduation from medical schools abroad, keeping a register of medical students, besides answering a daily correspondence which is gradually increasing in volume.

The work has never progressed more satisfactorily than it is progressing now, and, although much remains to be accomplished, the Council has every reason to feel that splendid results from its work have been obtained.

Respectfully submitted.

ARTHUR DEAN BEVAN,
Chairman.
N. P. COLWELL,
Secretary.

President Murphy directed that the above report be referred to the Reference Committee on Medical Education, and said:

I hope I will be pardoned for expressing in words what I see in the faces of the members of this House, a sense of extreme satisfaction with the work of this Council, as reported by Dr. Bevan, as to its fairness, its industry, its intelligence and its virility. If we had about seven to ten councils of this type and with these qualities in this Association, we could do from ten to twenty times the work we are doing to-day. (Applause.)

Committee on Apportionment Appointed

Dr. A. T. McCormack, Kentucky, moved that the order of business be interrupted and that the House proceed to the appointment of a Committee on Reapportionment in accordance with the suggestions made in the report of the secretary. Seconded and carried.

Dr. McCormack moved that the following, in addition to the President and Secretary, constitute the committee: Edwin Walker, Indiana; J. Z. Shedd, New Hampshire; Jere L. Crook, Tennessee. Seconded and carried.

The District of Columbia Society

Dr. G. Wythe Cook, District of Columbia, was accorded the floor on a question of personal privilege, and asked that a record be made of the following:

IN THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

WHEREAS, The medical profession of the District of Columbia has heretofore affiliated with the American Medical Association under the name of the Medical Association of the District of Columbia, and

WHEREAS, The Medical Association of the District of Columbia and the Medical Society of the District of Columbia, for the purposes of harmony and unification, did by unanimous vote of both bodies in joint session on the tenth day of July, 1911, amalgamate and adopt for the new body the name and title of The Medical Society of the District of Columbia, and

WHEREAS, The Medical Society of the District of Columbia in its constitution, under the heading of "status," declares: "This society shall be a continuation and amalgamation of the Medical Society of the District of Columbia (founded Sept. 26, 1817, and chartered by acts of Congress of Feb. 16, 1819, and July 7, 1838) and the Medical Association of the District of Columbia (organized Jan. 11, 1833)" and "This society shall be a representative medical organization of the District of Columbia, constituted and maintained in conformity with the general plan of the American Medical Association; it hereby declares its allegiance to the American Medical Association and agrees with other state and territorial medical associations to the formation and the perpetuation of the House of Delegates of the American Medical Association." Therefore, be it

Resolved, That the American Medical Association be and is hereby requested to recognize the Medical Society of the District of Columbia as the legitimate successor of the Medical Association of the District of Columbia and as such entitled to membership and representation in the American Medical Association with all the rights and privileges of its other constituent bodies.

The foregoing preamble and resolution was reported to the medical society by its executive committee and unanimously adopted at a regular meeting held April 17, 1912.

J. B. NICHOLS, President.
H. C. MACATEE, Recording Secretary.

The President directed that this statement be referred to the Reference Committee on Miscellaneous Business.

On motion the House of Delegates then adjourned until 2 p. m.

The Reference Committees

The list of committees, referred to on page 1783 and to which reports and other matters are referred for examination and recommendation, are as follows:

SECTIONS AND SECTION WORK

Wesley T. Mulligan	Rochester, N. Y.
Granville MacGowan	Los Angeles, Cal.
Hugh Cabot	Boston, Mass.
Thomas G. Davis	Pittsburgh, Pa.
A. H. Levings	Milwaukee, Wis.

RULES AND ORDER OF BUSINESS

W. R. Tipton	East Las Vegas, N. Mex.
A. R. Mitchell	Lincoln, Neb.
G. A. Warren	Black Rock, Ark.
G. R. Fisher	Bound Brook, N. J.
G. L. Taneyhill	Baltimore, Md.

MEDICAL EDUCATION

J. H. J. Upham	Columbus, Ohio
H. D. Arnold	Boston, Mass.
Reid Hunt	Washington, D. C.
George W. Guthrie	Wilkes Barre, Pa.
A. T. Bristow	Brooklyn, N. Y.

HYGIENE AND PUBLIC HEALTH

Oscar Dowling	Shreveport, La.
John Champlin	Westerly, R. I.
Edward Jackson	Denver, Colo.
Victor H. Stickney	Dickinson, N. Dak.
Lawrence Littlig	Davenport, Iowa

LEGISLATION AND POLITICAL ACTION

W. A. Evans	Chicago, Ill.
Morgan Smith	Little Rock, Ark.
A. B. Cooke	Nashville, Tenn.
Jefferson R. Kean (U. S. Army)	Washington, D. C.
W. C. Gorgas	Canal Zone, Panama

AMENDMENTS TO CONSTITUTION AND BY-LAWS

A. T. McCormack	Bowling Green, Ky.
Joe Beckton	Greeneville, Tex.
Seale Harris	Mobile, Ala.
J. N. Jenne	Burlington, Vt.
William L. Noble	Chicago, Ill.

REPORTS OF OFFICERS

Hubert Work	Pueblo, Colo.
J. W. Young	Grenada, Miss.
Donald Campbell	Butte, Mont.
W. W. Richmond	Clinton, Ky.
E. A. Hines	Seneca, S. C.

CREDENTIALS

D. Chester Brown	Danbury, Conn.
E. A. Vander Veer	Albany, N. Y.
E. W. Van Allen	Springfield, Mass.
E. J. Goodwin	St. Louis, Mo.
W. E. Anderson	Farmville, Va.

MISCELLANEOUS BUSINESS

A. C. Scott	Temple, Tex.
J. F. Highsmith	Fayetteville, N. C.
R. R. Smith	Grand Rapids, Mich.
P. A. Haley	Charleston, W. Va.
W. A. Jones	Minneapolis, Minn.

Second Meeting—Monday Afternoon, June 3

At the second session of the House of Delegates of the American Medical Association, held at the Solarium of the Hotel Traymore, Monday afternoon, June 3, the report of the Council on Health and Public Instruction was called for and presented. It was was not read in full but was laid before the House of Delegates in printed form as it appeared in the Handbook.

The report follows:

Report of the Council on Health and Public Instruction

To the Members of the House of Delegates of the American Medical Association:

The Council presents herewith its second report.

The report made to the House of Delegates at Los Angeles in 1911 covers the first seven months of the Council's existence from Nov. 1, 1910, to June 1, 1911. This report covers the eleven months from June 1, 1911 to May 1, 1912. During the past year the organization of the Council has not been changed. The work of the various bureaus and subcommittees of the Council will be taken up in order. In addition to this work, the Council has endeavored during the past year, to develop definite plans for permanent, constructive work with the intention of following up the most essential duties first, and endeavoring to make each year's work a foundation for that of the succeeding year.

The Council is profoundly impressed with the amount of public interest at present exhibited in health matters, and the need of proper instruction and education for the public on all questions relating to public health and the work of the medical profession. When the marvelous progress of the last thirty years in the knowledge of the cause and prevention of diseases is considered, it must be evident to all that it is only necessary to place the facts before the people to secure their confidence and support. But during the past thirty years, medical knowledge has advanced so rapidly, that a large portion of the public has been left behind. The gap thus created has only recently been realized. To bring together the people and the profession, to restore that confidence in the scientifically trained physician to-day that was in former years given to the family physician and to unite the public and the medical profession in an intelligent and irresistible campaign for better health conditions is one of the most important duties which now confronts this Association. This work has been delegated by this Association to the Council on Health and Public Instruction as its representative. If the results accomplished so far are not as great as might be desired, it is not through any lack of realization of the importance of its work by the Council, but rather through an earnest desire to lay secure foundations before attempting to build any more elaborate structure; to move slowly until sure of our position.

PLANS OF THE COUNCIL

Following the Los Angeles meeting and before the fall meeting of the Council, a memorandum, outlining the work for the coming year, was drafted by the Secretary and Chairman and sent to each member. After discussing the attitude of the public and the medical profession toward each other and the function of the Council as a medium of communication between physicians and the people, the following recommendations were made for the guidance of the Council during the coming year:

1. That the Council declare that in its judgment its principal mission is the development of public confidence in the purposes and work of the American Medical Association and of the profession.

2. That in addition to its present work and committee and bureau activities already provided for, the Council concentrate its efforts during the coming year on the following:

(a) Formulation and adoption of a platform setting forth the aims and purposes of the Association and the profession, and asking for the support and confidence of the public;

(b) Continuation and extension of the Press Bureau;

(c) Organization of a Speaker's Bureau;

(d) Compilation of a handbook for speakers;

(e) Organization and development of a Bureau of Literature.

These recommendations meeting with the approval of the Council, the extension of the Press Bureau was first taken up. Following this, the organization of a Speakers' Bureau was inaugurated and at the same time the collection of suitable material for a speaker's handbook was begun. The development of the Speakers' Bureau was found to involve some unexpected problems, which will be discussed later.

PRESS BUREAU

The organization and early development of the Press Bureau was considered at length in last year's report. A bulletin has been sent out every week, containing extracts from THE JOURNAL, abstracts of original articles, items of public interest, etc. During the latter half of 1911, beside the regular press bulletins sent to the daily newspapers, occasional bulletins were sent to other publications on the mailing list. Beginning with the first of January, 1912, the entire mailing list of selected publications was used. We are now sending a regular weekly bulletin to a mailing list of approximately 4,900 newspapers and publications, divided as follows:

Daily newspapers having a circulation of 3,000 or over	880
Daily newspapers having a circulation of under 3,000	1,235
Selected weekly newspapers in counties in which no daily is published	1,937
Religious papers	126
Agricultural papers	230
Educational	71
Labor	215
Fraternal publications	85
Miscellaneous	77
Total	4,856

SUBJECTS OF BULLETINS

A list of subjects considered in the Bulletin is attached in order to give some idea of the scope of this work:

June 2.—Cold-Storage Eggs; Our Vanishing Shore-Birds; Another Pure Food Decision; Sexual Hygiene in the Austrian Schools; Milk Legislation in Ontario; Safeguards for Marriage; Dietetics Taught by Cartoon; "Reasonable" Lying Permissible.

June 16.—The Public Drinking-Cup; The Supreme Court on the Food and Drugs Act; Prophylaxis of Fourth-of-July Tetanus; Great is Mammon; The Tuberculosis Patient After Sanatorium Treatment; Industrial Laboratory Secrecy.

June 23.—The Present Status of Antityphoid Vaccination; The Independent Press; The Declining Birth-Rate in Rural New York State; Convictions Under the Food and Drugs Act.

June 30.—The President and the Food and Drugs Act; Restriction of the Sale of Habit-Forming Drugs; Misrepresentation a Weapon of the Reactionaries; Suicide Reports in the Press.

July 7.—President-Elect Jacobi; A Saner Fourth; The Public and The Public Health; The Disinfection of Water-Supplies.

July 14.—The Germicidal Properties of Disinfectants; Pasteur; A Microscope for Two; Incompatibility Between Internal and External Applications.

July 28.—The Cholera Situation; Personal Liberty and School Inspection.

August 4.—Also "Getting" the Courts; Another Outrage; State Support of Medical Education; The Value of Vaccination in Preventing Small-Pox; Spotted Fever Carried by Wood Ticks; School Children and Cattle; En-Ar-Co Oil a Dangerous Mixture; Macaura Comes Back.

August 11.—A "Trust" Which Should be Encouraged; Doctor's License Revoked for Fraud; Cremation Slowly Increasing; Civilization and The Tropics; Danger of Tuberculosis Infection through Butter; German Health Resorts.

August 18.—Care of Infants in Hot Weather; Another Consumption Cure; Leslie's Weekly—A Consistent Journal; Dictator McCabe.

August 18.—(Special Bulletin on Medical Education). Number of Medical Students in the United States; Medical Graduates in 1911; Women in Medicine; Number of Colleges; The Cost of a Medical Education; The World's Supply of Medical Schools; Colleges Listed as Acceptable (Class A); Medical Colleges Closed During the Year; Gifts to Medical Education During the Past Year; The Passing of Physiomedicalism; Seven Years' Progress in Medical Education.

August 25.—Fourth-of-July Accidents for 1911; Control of Typhoid in the Army; The Irrepressible Conflict; Malta Fever in Texas; Deaths by Drowning; Health Campaign in the South; A Possible Solution of the Storage Egg Problem.

September 2.—Effects of Alum in Baking-Powder; An Epidemic as the Result of Kissing; Who is "H. L. Harris"?; Pellagra Spreading Rapidly.

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September 15.—Heating and Ventilation; Testimonial of Dead Woman a Boomerang; Charity and Stamina; Value of Cheese as a Food; The Dangers of Flannelette; Francis Truth —A Divine Healer Up to Date.

September 22.—Malta Fever in Texas; Dr. Wiley Exonerated; Sectarian Licensing Boards a Danger to Public Health.

September 29.—"Medical Trust" Asks Congressional Investigation; Books for the Blind; Hookworm Infection in the Gold Mines of California; Controlling Hydrophobia in the Human Subject; Malta Fever in Texas; Effective Garbage Disposal.

October 13.—A National Department of Health; Sudden Disaster and Constant Disease; Antifat and Society Women; Bubonic Plague.

October 20.—Bogus Scientific Institutions; What's the Matter With Kansas?; Expensive Sugar or Cheap Saccharin, Which? The Alleged Hygienic Value of Ozone; Another Interference with the Freedom of Cattle.

October 26.—Typhoid Fever and the Water of the Great Lakes; A Milk-Borne Epidemic of Typhoid Fever; Success of Cold Storage is no Guarantee of the Quality of Cold-Storage Food.

November 3.—Benzoate of Soda Again; Protecting the Health of Prisoners; Sectarian Catspaws for Fakers; Politics and the Public Health Service; Dust a Cause of Municipal Disease.

November 10.—Can Hair Turn White in a Night? Milk-Borne Tonsillitis; Prevention and Hot Treatment; Irrational Governmental Decisions on Benzoate; Generous But Not Just; Probable Tapeworm Infections of Michigan Waters; Another Patent-Medicine Man in the Meshes of the Law; Chamlee Goes to California.

November 17.—The Profits of Vaccination; Carnegie University; Aviator's Disease.

December 1.—Senator Works Declines to Furnish Facts; Poisoning by Gas; The Prevention of Industrial Disease; Teeth not a Luxury.

December 8.—The Washington Typhoid Epidemic; Governmental Aid for Cattle, Why Not a Little for Man? Senator Works as a Trust-Buster; Vital Statistics Legislation; Eradicating Rocky Mountain Spotted Fever; The Christmas Red Cross Film.

December 15.—Dentistry—Old and New; The Banishment of the Common Drinking-Cup; A Commission to Investigate the Vaccination Question; Control of Occupational Diseases.

December 22.—Need of a Central Body to Protect the Great Lakes; Senator Owen Amends His Bill; The Canal Zone as an Ideal Health Resort; Some Officers of the National League for Medical Freedom.

January 5.—Vaccination for Typhoid Fever; Shuttlemakers' Disease and its Cause; Deaths of Physicians in 1911; Judicial Wisdom.

January 12.—The Referee Board Report on Saccharin; The Key to the Situation; Why the Owen Bill Should Pass; Water-Drinking with Meals; Society of Universal Science; The Owen Bill.

February 9.—Development of Frail Children; Lead-Poisoning; Typhoid Fever Again in Milwaukee; Health Resorts and Infection; Saccharin Again; Ozone Myths; The Health of the People; Systematic Compaign Against Cancer; Wood Alcohol Prohibited in Austria in Foods and Drugs; When the Hen Embalms Her Eggs.

February 16.—What's Sauce for the Ecuador Goose is Sauce for the American Eagle; Vegetables as a Factor in the Spread of Typhoid: A Combination of "Ethical Proprietary" Manufacturers; The Significance of Bovine Tuberculosis in Human Disease; The Propaganda for Reform.

February 23.—Body Cells and Food Substances; Spices as Preservatives; The Relation of Rice to Certain Diseases; Mrs. Eddy and the National League for Medical Freedom; A Good Way to Prevent Accidents; Professional Reform or Public Discipline; Public Parks and the Physician.

March 1.—A Rational Calendar; A Triumph of Sanitation; Sewage Disposal and Bad Odors; A Rational Holiday Schedule; Faithful Work.

March 8.—Southern Educator Predicts Health Age; Physical Effects of Immigration; Health Conditions in Alaska; Are Americans Degenerating? Practical Typhoid Fever; Health Questions and Politics; Milk-Fat, Tissue-Fat and Food-Fat; Property Rights vs. Public Health.

March 15.—A New Life-Saving Feature in the Construction of Tenements; The Thyroid and Moral Responsibility; The Problem of the Feeble-Minded; The Influence of Caffein on Mental and Moral Efficiency and on The Circulation; Progress in Vital Statistics Registration; Epidemics of So-Called Influenza.

March 22.—A Legal Decision on a Medical Question; Nostrum Advertising in the Religious Press; Hampering Animal Experimentation; Transmission of Fever by Lice; Life-Insurance Companies and Conservation of Human Life; Who Will Succeed Wiley? What's the Matter with Michigan? Dr. Wiley Resigns.

March 29.—Sanitation at Panama; A New Arsenical Danger; Mental Disorders and Immigration; Tropical Diseases in Panama; Progress of Workmen's Compensation Legislation; The "Blue Sky" Law and Medical Frauds; National Mental Hygiene; Nature's Creation.

April 6.—Cheese—A Neglected Food; The Royal Society; What is Hunger? Conquering Tropical Diseases; Health and Marriage; Merited Honor; "The Mills of the Gods"; Typhoid Fever a Preventable Disease.

April 12.—Information Concerning Pellagra; Malta Fever in the United States; Increased Pay in Public Health Service; Congress on Hygiene and Demography; Food Wastes in Public Institutions; Voluntary Submission to Treatment for Insanity; Beriberi, Rice and Beans.

April 20.—Typhus Fever and Body Lice; Why We Should Fear Bugs; Alcohol and Insanity; The Value of Animal Experiments; Is Certified Milk Safe? Books and Bacteria; Clara Barton; The Insanity Dodge Unsuccessful in Canada; The Report of the Royal Commission on Vivisection; Cheap Confectionery in Pennsylvania; A Short and Easy Road to Wealth; What One State Has Done for the Country; The Owen Bill Before the Senate.

April 27.—Race Decay and Social Hygiene; Proposed Amendments to the Immigration Law; The Federal Children's Bureau and Its First Director; Business and Sanitation; Clean Milk at a Reasonable Price.

In addition to the weekly distribution of this material, a circular letter addressed to the editors of the newspapers was sent out on January 2, stating the position of the Association on public health matters, and its reasons for taking up the education of the public.

From June 1, 1911, to Dec. 31, 1911, there were sent out 26 press bulletins with an average circulation of 2,200, or a total circulation of 57,200. From Jan. 1, 1912, to May 1, 1912, there have been sent out 14 bulletins, with an average circulation of 4,900, or a total circulation of 68,600, making a total for the eleven months from June 1, 1911, to May 1, 1912, of 40 bulletins with a total circulation of 125,800 copies.

Space does not permit of the insertion of a list of publications which have used material from the press Bulletin, but the newspaper clippings containing such extracts and sent in by the press clipping bureaus furnishing press service to THE JOURNAL show that the aggregate circulation of newspapers from which such clippings were received in 1911 was 5,869,278 and for the first four months of 1912 was 4,734,234.

DISTRIBUTION OF EDUCATIONAL MATTER ON FRAUDS AND NOSTRUMS

Using the press bulletin mailing list as a medium for the distribution of the reprints published by THE JOURNAL on nostrums and quackery, copies of separate reprints have been mailed from time to time to the newspapers in order to keep them informed as to the work of the Association in exposing frauds. Beginning June 14, 1911, the following pamphlets were sent at intervals of one week to the editor of each daily newspaper in the country:

June 14.—Convictions Under the Food and Drugs Act.
June 21.—Chamlee Cancer Cure Fraud.
June 28.—International Medical Institute.
July 5—Rupert Wells.
July 12.—Murine.
July 19.—Curry Cancer Cure Fraud.
July 26.—Yonkerman's Tuberculozyne.
Aug. 2.—Toxo-Absorbent Company.
Aug. 9.—Drs. Mixer.
Aug. 16.—A Family of Cancer Fakers.
Aug. 23.—Nature's Creation.

These eleven pamphlets sent to approximately 2,150 newspapers involved a distribution of about 23,650 pamphlets.

The next lot of pamphlets were sent to the same newspapers, and also to religious, agricultural, labor and other special publications, forming a total mailing list of 2,500 papers. This list comprised the following:

October 4.—Lung Germine.
October 11.—Oxidaze.
October 18.—Nature's Creation (Revised Edition).
October 25.—Van Bysterveld Medicine Co.
November 1.—Aiesol (Lloyd).
November 8.—J. Lawrence Hill, M.D.
November 15.—Bertha C. Day Co.

November 22.—Oxydonor and Similar Fakes.
November 29.—Dr. Branaman.
December 6.—American College of Mechano-Therapy.
December 13.—Press Agents and Preservatives.
December 20.—Interstate Remedy Company.

These twelve pamphlets sent to 2,500 newspapers involved a distribution of 30,000 copies.

Beginning January 10, a similar distribution of pamphlets to country weekly newspapers was begun. This list comprised approximately 1,950, the following pamphlets being mailed:

January 10.—Lung Germine.
January 17.—Nature's Creation.
January 24.—Van Bysterveld Medicine Company.
January 31.—Aicsol.
February 7.—J. Lawrence Hill, M.D.
February 14.—Bertha C. Day Co., of Fort Wayne, Ind.
February 21.—Oxydonor and Similar Fakes.
February 28.—Interstate Remedy Company.
March 6—Fake Gall-Stone Cures.
March 13.—Press Agents and Preservatives.
March 20.—Carnegie University.
March 27.—Convictions Under the Pure Food and Drugs Act.
April 3.—Cora B. Miller.
April 10.—Dr. Branaman.
April 17.—Nature's Creation.
April 24.—Marjorie Hamilton.
May 1.—Stuart's Plaster-Pads.

Making a total of 33,150 pamphlets distributed to country newspapers.

The total number of pamphlets sent out to newspapers on the three lists enumerated above, amounts to 86,800.

In December, 1911, a copy of "Nostrums and Quackery" was mailed to the editors of 2,500 publications. This included every daily newspaper and every religious, agricultural, educational, fraternal and labor publication in the country. Many of these publications reviewed the book, commenting favorably on it and commending the Association for sending it out.

The results of this work are apparent to any one who has been watching the newspapers carefully for the past two years. The attitude of a great majority of newspapers toward the heartless frauds and impositions that have been practiced on the public is entirely different from that which characterized them a short time ago. The heavy handicap under which this work is being conducted is evident when one realizes that the patent medicine and nostrum advertising is the most lucrative of any form of newspaper advertising. While it is too much to expect the newspaper editors to close their advertising columns to this class of patronage, many of the better class of newspapers are doing so, and many more are exercising greater care than ever before and are thereby excluding the worst specimens of this class. When it is realized that the financial power of the patent medicine manufacturer and dealer, the manufacturer of adulterated and sophisticated food and the medical faker constitute the influence which is now being used to defeat and obstruct public health legislation and progress all over the country, the importance of exposing these people to the newspaper publishers and editors becomes apparent.

A most gratifying evidence of the attitude of newspaper men toward the matter sent out by the Press Bureau is found in the fact that although for a year past we have been sending regular installments of printed matter to nearly 5,000 newspapers and publications, we have only received in that time, six refusals to receive it or requests that it be discontinued. Many of the most influential newspapers are to-day regularly using this material and are giving assistance and cooperation in the education of the public. Many of the higher grade newspapers habitually use the material sent them as leading editorials or as matter for editorial comment.

The principal difficulty encountered by the editor of the country weekly which wishes to use the material sent it, is the cost of composition. A number of editors of country weeklies have written the Secretary, asking whether it was not possible to send "plate matter," i. e., stereotyped plates ready to be inserted into the forms, instead of printed matter which has to be set up separately for each paper. For the present this has not been possible, but the Council hopes later on to be able to add such a feature to its press service.

SPEAKERS' BUREAU

Following the development of the Press Bureau, the organization of a Speakers' Bureau was authorized by the Council, and the Secretary was instructed to inaugurate this feature on Jan. 1, 1911. Accordingly, a letter was sent to about 100 members, selected after correspondence with members of the Council, secretaries of state societies, and others. The plan proposed was that appointments be made for public addresses for meetings held under the auspices of the local medical societies in states adjoining that in which the speaker lived. This arrangement was suggested in order to economize time for the speakers and expenses for the Council. The Council agreed to pay the traveling expenses of speakers filling appointments made through the lecture bureau. Sixty-four of those written to agreed to undertake this work under the conditions laid down. The names of the speakers now listed with the bureau appear below.

ALABAMA
Dr. William H. Sanders..Mobile
Dr. Seale Harris.....Mobile

ARIZONA
Dr. J. W. Foss.....Phoenix
Dr. J. W. Flinn.....Prescott

ARKANSAS
Dr. Morgan Smith...Little Rock

CALIFORNIA
Dr. W. F. Snow....Sacramento

COLORADO
Dr. R. W. Corwin.....Pueblo

DISTRICT OF COLUMBIA
Dr. W. M. Barton...Washington
Dr. L. H. Reichelderfer.....Washington

MAINE
Dr. Edwin Gehring....Portland

MARYLAND
Dr. C. H. Jones.....Baltimore

PENNSYLVANIA
Dr. G. W. Wagoner...Johnstown

RHODE ISLAND
Dr. G. T. Swarts....Providence

SOUTH CAROLINA
Dr. J. W. Jervey.....Greenville
Dr. E. A. Hines.....Seneca

SOUTH DAKOTA
Dr. J. W. Parson....Sioux Falls

TENNESSEE
Dr. G. H. Price.....Nashville
Dr. B. F. Turner.....Memphis

MASSACHUSETTS
Dr. M. J. Rosenau.....Boston
Dr. M. W. Richardson...Boston

MICHIGAN
Dr. A. F. Fischer.....Hubbell
Dr. G. L. Kiefer.....Detroit
Dr. E. W. Abrams...Dollar Bay
Dr. Victor C. Vaughan.Ann Arbor

MINNESOTA
Dr. H. M. Bracken.....St. Paul
Dr. H. W. Hill.....Minneapolis
Dr. H. L. Tomlinson....St. Paul

MISSISSIPPI
Dr. W. S. Leathers...University

MONTANA
Dr. T. D. Tuttle.....Helena
Dr. T. C. Witherspoon....Butte

FLORIDA
Dr. J. Y. Porter....Jacksonville
Dr. Hiram Byrd....Jacksonville

ILLINOIS
Dr. J. W. Petit.....Ottawa
Dr. E. W. Fiegenbaum.....Edwardsville

INDIANA
Dr. F. A. Tucker....Noblesville
Dr. J. N. Hurty....Indianapolis

KANSAS
Dr. S. J. Crumbine.....Topeka

KENTUCKY
Dr. W. L. Heizer..Bowling Green

LOUISIANA
Dr. Oscar Dowling...Shreveport

NEBRASKA
Dr. D. T. Quigley..North Platte

NEW JERSEY
Dr. Richard C. Newton.....Mont Clair

NEW MEXICO
Dr. S. D. Swope.....Deming

NEW YORK
Dr. S. A. Knopf.....New York
Dr. F. Park Lewis.....Buffalo

NORTH DAKOTA
Dr. V. H. Stickney....Dickinson

OHIO
Dr. C. A. L. Reed....Cincinnati

OKLAHOMA
Dr. J. C. Mahr.....Muskogee

OREGON
Dr. C. S. White.....Portland
Dr. C. J. Smith.....Pendleton

TEXAS
Dr. I. C. Chase.....Fort Worth
Dr. M. M. Carrick.....Dallas
Dr. C. E. Cantrell....Greenville

UTAH
Dr. W. B. Ewing.Salt Lake City

WASHINGTON
Dr. E. R. Kelley.....Seattle

WEST VIRGINIA
Dr. C. A. Wingerter...Wheeling
Dr. S. L. Jepson.....Wheeling

WISCONSIN
Dr. M. P. Ravenel.....Madison

A letter was then sent to the secretary of each state association, outlining a plan, and enclosing a list of speakers from surrounding states. The secretary of the state association was requested to take the matter up with local organizations and to inform them that speakers for public meetings should be secured through the lecture bureau. It was estimated that each meeting would involve an expense of about $25. The amount at the disposal of the Council would provide for about 300 meetings, or an average of six to each state. Instructions were given as to methods of arranging for meetings, best methods of advertising, etc., in the light of experience gained through Dr. McCormack's meetings in the last seven years.

In only eleven states has the organized medical profession availed itself of this opportunity to secure competent speakers for the education of the public. From February 1 to May 1, thirty-seven meetings have been held, and in seven cases, requests for speakers have not been filled for various reasons, making a total of forty-four requests for speakers from eleven states. These requests arranged in States, are as follows:

ARKANSAS.—Meeting held, Little Rock.

ILLINOIS.—Meetings held, Galesburg, Urbana (4), Jacksonville, Ottawa, Aurora. Speakers requested but not furnished, Carbondale, Nashville.

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KANSAS.—Meetings held, Hutchinson, Holton, Newton.

KENTUCKY.—Meeting held, Bowling Green.

MICHIGAN.—Meetings held, Grand Rapids, Muskegon, Ann Arbor (3), Lansing. Speakers requested but not furnished, Traverse City.

MINNESOTA.—Meetings held, Winona (2).

NEW MEXICO.—Meetings held, Albuquerque, Silver City.

OKLAHOMA.—Meetings held, Oklahoma City, Muskogee.

PENNSYLVANIA.—Meeting held, York. Speakers requested but not furnished, Bradford, Greenburg.

SOUTH DAKOTA.—Meetings held, Mitchell, Aberdeen, Deadwood, Pierre, Sioux Falls, Waterloo.

UTAH.—Meetings held, Ogden, Salt Lake City. Speakers requested but not furnished, Manti.

WISCONSIN.—Meetings held, Grand Rapids, Wausau, Waukesha, La Crosse, Beloit.

In the following states no requests for speakers have been received: Arizona, Colorado, Delaware, District of Columbia, Florida, Georgia, Idaho, Iowa, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia.

It was originally estimated that the expenses of each meeting would amount to about $25. The total expenses of furnishing speakers for the twenty-seven meetings which had been held, and for which expense accounts had been rendered at the time of the preparation of this report, shows a total expense of $688.82, or an average expense of $25.51 per meeting. As these meetings were held in different parts of the country, this can be taken as a fair estimate. It is probable that speakers for public meetings can be furnished in any state at an average cost of $25 per meeting.

In view of the fact that only eleven states availed themselves of this opportunity to secure speakers, and that in many states no apparent effort was made to interest their profession or the public, it does not seem advisable to restrict this work in the future to medical organizations. In fact, there is no reason why it should be so restricted. Physicians, especially those prominent in the management of medical organizations, are, as a rule, busy men. The sacrifice of time and strength required to arrange for, and successfully conduct public meetings is an unjust burden on the physician. The work is for the benefit of the public, and the public should bear the burden as it receives the benefit. While continuing the policy of furnishing speakers for meetings held by local medical societies, it also seems advisable in the future to provide speakers for meetings held under the auspices of women's clubs, local health leagues, teachers' and farmers' institutes, high schools, colleges and universities. There is reason to believe that the educational effect of such meetings will be far greater than those held under the management of professional organizations.

The first four months of the speakers' bureau are to be regarded largely as experimental. It was necessary to find out by actual experience how much demand existed for such meetings, and whether this demand could best be supplied through medical organizations; what would be the average expense, what class of speakers were best needed to fill the demand, etc. The experience gained will be of value in extending this work during the coming year. As we believe that the public will ask for a great many more meetings than have been requested by medical societies, a liberal appropriation for this purpose should be made for the coming year. It will also be necessary, in order to secure the interest and confidence of the public, to approach them first through the services of the leaders of the profession, those who are known throughout the country and who stand high in public and professional esteem. These leaders of the profession must interest and instruct the public while younger and unknown men are being trained as public teachers. Such a service will require sacrifices but will in the end yield large returns in public support and confidence

BUREAU OF LITERATURE

The amount of time required to develop the Speakers' Bureau and the other work of the Council has made it impossible to take up to any extent, as yet, the development of a Bureau of Literature. The Council has, in the main, been limited to the distribution of pamphlets containing reprints of THE JOURNAL articles on Nostrums and Quackery, as well as a few general pamphlets containing reprints from THE JOURNAL, among these being the following:

Why Should Vital Statistics Be Registered?
The Control of Typhoid Fever.
Dust Menace and Municipal Disease.
Report of the Committee of the Section on Preventive Medicine and Public Health on Model Health Ordinances for a City which is a Resort for Consumptives.
Report of the Committee on Houses for Working People.
Report of the Committee on the Purification of Sewage.
Report of the Committee on Laws and Methods of Control of Tuberculosis in a Health Resort.

The Council now has on hand, and has ordered the publication of an excellent paper by Dr. J. W. Pettit of Ottawa, Ill., on a model program for local and state organizations for the suppression of tuberculosis, an abstract of which was read at the Conference on Public Health and Medical Legislation, held Feb. 26 and 27, 1912.

The Council has also distributed a large number of copies of the brief prepared by the attorneys of the Association on chiropractic, and a pamphlet containing a transcript of the testimony for the defense in a Wisconsin case, in which a chiropractor was tried and convicted of practicing medicine without a license.

There is a field and a demand for pamphlets on health topics written by men of recognized standing in the profession for distribution at a nominal cost to the public. The extent of this field is covered by the various state boards of health, as set forth in the report of the Council for the last year. It is the present endeavor of the Council to find a field and a line of subjects not covered by any existing health agency which can be taken up and developed.

HANDBOOK FOR SPEAKERS

Realizing that if any number of speakers were to be put into the field and effective work secured, it would be necessary to compile a reference book containing authoritative facts, figures and references regarding infections and preventable diseases, the Secretary was instructed by the Council to begin the preparation of such a handbook. Circumstances made it impossible to advance in this direction very rapidly until after the first of January, since which time the desired material has been compiled on tuberculosis, typhoid fever, diphtheria and yellow fever. Suitable material on other subjects is under preparation, as this report is written. It is planned to prepare and place in the hands of each speaker a reference handbook containing essential facts about preventable diseases, quotations from recognized authorities, table of figures, reports, references, etc., on all subjects connected with public health and the education of the public thereon. Such a book will grow in value with each edition and will soon be recognized as a storehouse of material for public-health workers.

ORGANIZATION

The report for last year covered Dr. McCormack's work up to July 1. The first week in September he spent in Honolulu. He spoke in Fresno, Cal., on September 13, in Reno, Nev., on September 15 and on September 17 began a tour of the northwestern states. From September 17 to 25 he was in Oregon; September 26 to October 1 in Washington, October 2 to 8 in Utah, and October 9 to 12 in Idaho. Six meetings were held in Oregon, six in Washington, two in Utah and two in Idaho. November 13 to December 3 was devoted to Illinois, ten meetings being held. From the close of the Los Angeles meeting to the first of December, Dr. McCormack visited eight states and addressed twenty-nine public meetings.

At the meeting of the Trustees in October of 1911, the management and responsibility for Dr. McCormack's work, and the control of his employment was placed in the hands of the Council. After receiving notification of this change from the Board of Trustees, Dr. McCormack was asked to indicate the conditions and terms under which it would be satisfactory to him to continue his work. He replied that he did not desire to continue it, and asked that his work be terminated with the first of December, 1911. The Council, both through its Chairman and by formal resolution has repeatedly urged Dr. McCormack to indicate the conditions and terms under which he would be willing to consider a continuation of his valuable work, but he has so far declined to consider a resumption of his activities. No appointments have been made for him since the first week in December, 1911. It is the earnest and sincere desire of the Council that Dr. McCormack may be induced to devote at least a part of his time to the work which he has so ably carried on for many years.

LEGISLATION

The progress of the campaign for a National Department of Health is doubtless familiar to all the members of the House of Delegates. As the efforts of the Association for

the passage of the Owen bill have been placed in the hands of an independent committee which will report to you direct, it is not necessary to discuss the details of this campaign in this report.

Beginning the last week of February, a letter was sent to a selected correspondent in the home town of each member of Congress, asking for the name of the family physician of the congressman. A second letter was then sent to the family physician of each congressman, so far as obtainable, asking him to write or call personally on the congressman in question, explaining the purpose of the Owen Bill, and asking for his support.

On April 29, a circular letter was sent to each member of the National Auxiliary Legislative Committee, numbering about 2,000, asking each member to wire at once to the senators from his state, asking them to support the Owen Bill for the sake of public health; to have as many physicians as possible in each county do the same thing; to have a resolution, endorsing the bill and asking the senators to support it, passed at once by the county society, and a certified copy sent to both of the senators; to secure the endorsement of as many prominent citizens in the county as possible; to secure endorsements of women's clubs, local health organizations, civic and commercial organizations and other bodies, and to get the endorsement of any newspapers in the county with favorable editorial comments, if possible. With this letter was sent a copy of the report of the Senate Committee and a reprint from THE JOURNAL giving an extract from the Congressional *Record*, showing the debate on the floor of the Senate.

In addition to these two series of letters, a large amount of printed matter has been distributed. The Bulletin for Nov. 15, containing the text of the Owen Bill, editorials and extracts from THE JOURNAL and many newspapers, biographical reports regarding the promoters of the National League for Medical Freedom, cartoons and other material, has been widely distributed. Four editions of this bulletin were printed, amounting to about 20,000 copies. A large number of copies of Senator Owen's speech of the report of the Senate Committee on the Owen Bill, and of various reprints from THE JOURNAL have also been distributed, being sent to medical societies, women's clubs and individuals asking for literature.

Regarding public health legislation in the states, the following legislatures have been in session during the past winter: Kentucky, Maryland, Massachusetts, Mississippi, New Jersey, New York, Rhode Island, South Carolina and Virginia. The legislature in Louisiana convenes in May.

Among the principal measures adopted have been the following:

KENTUCKY.—A repealing vital statistics law was defeated. An optometry bill was defeated. An effective provision made for regulating opticians. A bill reorganizing the state board of health was defeated. An investigation of the books and official activities of the secretary of the state board resulted in a report highly commending the work of this body. Senate bill No. 56, placing the power to test cattle for tuberculosis in the hands of the county courts instead of the state board of health was passed but later vetoed by the governor.

MISSISSIPPI.—A new medical practice act was adopted, also a bill providing for the registration of vital statistics. Mississippi is entitled to great credit as the first of the southern states to adopt a model up-to-date vital statistics law.

NEW JERSEY.—Sterilization law adopted.

VIRGINIA.—A bill amending the medical practice act and enlarging the powers of the state examining boards was passed. Also a bill for the registration of vital statistics. Chiropractic and optometry bills were defeated. The state board of health was given an appropriation of $35,000. A bill amalgamating the medical department of the University of Virginia and the Medical College of Virginia was defeated.

BUREAU OF PROTECTION OF MEDICAL RESEARCH

The series of pamphlets on this subject prepared by the committee under the chairmanship of Prof. W. B. Cannon, has been increased by the publication of a paper on Animal Experimentation and Diphtheria, by W. H. Parks of New York, and an article on Animal Experimentation and Its Benefits to Mankind, by Prof. Cannon. These two pamphlets form Nos. 22 and 23 of the series, and practically conclude it. This series is conceded to be the best collection of material on animal experimentation adapted to popular use that has been prepared. They are in constant demand and are ready at any time for the instruction of the public in any state in which ignorant or sentimental agitators may attempt to influence public opinion against proper research methods for the advance of scientific medical knowledge.

COLLECTION OF STATE LAWS

The collection of state laws on health topics has been enlarged and rearranged during the past year. Laws on twenty-eight subjects pertaining to public health have been secured from all of the states insofar as they have been enacted. The collection of supreme court decisions on medical practice acts, powers and duties of state and municipal health officers, public health functions of the state, etc., has also been materially increased.

CARTOONS

At the Los Angeles meeting in 1911 the Council offered a prize of $200 for the best series of six cartoons on public health topics. A gratifying exhibit resulted, about 400 cartoons being submitted. In addition to acquiring the series awarded the prize, a number of others were purchased. During the year, cartoons on special subjects have been prepared, and have appeared in THE JOURNAL and in some of the reprints on Nostrums and Quackery. In the bulletin for Jan. 15, 1912, these cartoons were printed. Stereotyped plates of these cartoons have been furnished to a considerable number of newspapers, health bulletins, county society bulletins, etc. Our experience of the past year indicates that the cartoon has a legitimate place in public health education, and that it is capable of extensive development. It is hoped that sets of the series awarded the prize at this year's exhibition can be reproduced full size, suitable for framing for physicians' offices, and reception rooms, public health exhibits, etc.

SPECIAL NUMBERS OF THE BULLETIN

The American Medical Association Bulletin has been used to distribute information and material for public and professional education. The Bulletin for May 15, 1911, contained the Post-Graduate Study Course for 1911 and 1912. This was distributed to county societies wishing to follow this course. The Bulletin for Sept. 15, 1911, which was a special number containing in the main a reprint of the number for Nov. 15, and was used in large quantities in the states in which optometry bills were introduced during the past winter, four editions being printed in order to supply the demand.

The Bulletin for Nov. 15, 1911, was devoted entirely to the campaign for a National Department of Health. It consisted of cartoons, editorials, extracts from THE JOURNAL, a summary of the Owen bill, as well as the full text of the bill, numerous editorial extracts from newspapers and biographical and other matter regarding the officers of the National League for Medical Freedom. This Bulletin has proved of the utmost value in educating the public and the profession on this subject, between twenty and twenty-five thousand copies of it having been distributed in January, February and March. The Bulletin for January 15 was devoted entirely to the work of the Council, containing an account of the various branches of this work, its committee, etc., as well as all the cartoons which had appeared up to the time of publication.

OTHER PAMPHLETS

In addition to the distribution of the numbers of the Bulletin, the pamphlet on Vital Statistics has been reprinted and widely distributed, as well as the report of the Senate committee on the Owen bill. Large quantities of Senator Owen's speech have also been distributed. This speech was made in the United States Senate on March 24, 1910. A supply of reprints of this speech has been furnished by Senator Owen.

COMMITTEES APPOINTED

Early in the fall of 1911 Mr. John F. Gilchrist, vice-president of the Commonwealth Edison Company of Chicago and president of the Electric Light Association, requested the Council, in behalf of his association, to appoint a commission to take up the question of resuscitation from electrical shock, with a view to preparing an authoritative chart containing the latest and most accurate information on this subject for distribution and exhibition in electric power houses, relay stations, and other places where the employees are exposed to danger from electrical currents. After a number of conferences and much correspondence it was decided to create a joint committee to be appointed by the Council and to be made up of representatives of the American Medical Association, the National Electrical Light Association, and the American Institute of Electrical Engineers. The committee was accordingly appointed as follows:

Committee to Study Resuscitation after Electrical Shock—Dr. W. B. Cannon, Chairman, Professor of Physiology, Harvard Medical School, Boston.

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Nominated by the American Medical Association.—Dr. Yandell Henderson, Professor of Physiology, Yale University, New Haven, Conn.; Dr. George W. Crile, 214 Osborn Building, Cleveland, Ohio; Dr. S. J. Meltzer, Rockefeller Institute, New York City.

Nominated by the National Electrical Light Association.—Dr. Edward A. Spitzka, Professor of Anatomy, Jefferson Medical College, Philadelphia; Mr. W. C. L. Eglin, Philadelphia Electric Co., Philadelphia.

Nominated by the American Institute of Electrical Engineers.—Prof. Elihu Thompson, Harvard University, Cambridge, Mass.; Dr. Arthur E. Kennelly, Ex-President of the American Institute of Electrical Engineers, Lynn, Mass.

Elected by the Committee.—Mr. W. D. Weaver, Secretary, Editor *Electrical World*, 239 West Thirty-Ninth Street, New York City.

The Council feels that it has reason to congratulate the Association on the appointment of this committee, representing as it does, the best men in physiology and research, as well as men of international reputation in electrical circles. It is also gratifying to have established friendly relations with such bodies as the National Electrical Light Association and the American Institute of Electrical Engineers. The plan followed in establishing this committee can be adopted to advantage in other lines.

COMMITTEE ON COOPERATION WITH THE NATIONAL EDUCATIONAL ASSOCIATION

At the meeting of the Council at Los Angeles in June, 1911, the appointment of a permanent committee to serve with a similar committee from the National Educational Association was authorized. The committee appointed by the Council consists of Dr. R. W. Corwin, Chairman, Pueblo, Colo.; Dr. M. J. Rosenau, Boston, Mass.; Dr. J. M. Dodson, Chicago.

A committee appointed to represent the National Educational Association consists of Thomas D. Wood, Chairman, Jacob A. Shawan, Albert E. Winship, John F. Keating, Philander P. Claxton, William H. Allen, Secretary.

This committee met at St. Louis in February, the meeting of the executive committee of the National Educational Association, and will also meet in Chicago in July at the general meeting of the association.

OTHER COMMITTEES

The Council has also authorized the appointment of a committee on medical expert testimony, to consist of representatives of the American Medical Association, the American Bar Association, and the Commission on Uniform Laws. The Council has also authorized the appointment of a committee on railway sanitation to consist of representatives of the American Medical Association, of the Association of Railway Surgeons, of state boards of health, and probably of the administrative departments of some of the large railroads. The Council has also authorized the organization of a vital statistics legislation committee to consist of representatives of the American Medical Association, the American Public Health Association, the American Bar Association, the Commissioners on Uniform Laws, and the Bureau of the Census to consider any changes or modifications which may be necessary in the present model law.

Correspondence regarding the formation of these committees is going on at the time this report is written.

ANNUAL CONFERENCE

The Joint Annual Conference on Medical Education and Legislation was held in Chicago, Feb. 26 and 27, 1912. In addition to those heretofore invited to these conferences, an invitation was sent to the officers and members of all state boards of health, as well as to the officers of the sixty largest cities. The second day's program was of great interest and benefit. The annual conferences held under the joint auspices of the Council on Medical Education and the Council on Health and Public Instruction have become a recognized feature of the year's work and are of great benefit in working out effective plans for improving conditions.

AVOIDANCE OF CONFLICTING COMMITTEES

This Council was established at the St. Louis session in 1910. Previous to its organization, members of the House of Delegates will recall several years of discussion as to the best way of avoiding the frequent appointment of independent, temporary committees with overlapping jurisdiction and without proper provisions for carrying on their work. After two years' deliberation, it seemeed to be the judgment of the House of Delegates that there should be four permanent councils or boards which should be in continual existence with offices at the Association headquarters, and that the principal activities of the Association between sessions of the House of Delegates should be covered by these four councils. The fields of activity of the Council on Pharmacy and Chemistry, and the Council on Medical Education, are evident. At the Los Angeles meeting the Judicial Council was practically reorganized and its functions enlarged so as to cover any unoccupied territory. The line that was evidently intended to be drawn between the work of the Judicial Council and that of the Council on Health and Public Instruction, was that the Judicial Council should have jurisdiction over all matters relating to the internal activities and relations of the organization, while the Council on Health and Public Instruction should have oversight of all matters pertaining to the external relations of the organization and the profession. The advantages of such a system of permanent, responsible councils over that of temporary, independent and often hastily created committees with overlapping and contradictory discussions is too evident to require discussion. The Council begs to bring to the attention of the House of Delegates the plan in accordance with which it was organized, and to suggest that careful consideration be given to the authorization of new and independent committees, and that such action be taken only when it is evident that the work of the proposed committee does not lie within the province of one of the four existing permanent boards of the Association. Committees appointed by the Council after careful consideration, lengthy correspondence, and consultation with other and outside interests, are almost certain to be more satisfactory in their results than committees hastily selected or created without careful consideration of the exact limitations of their authority. Such a committee as that appointed on Resuscitation from Electrical Shock would be almost impossible, without the utmost and careful deliberation in its selection. The creation of new and independent committees charged with functions lying within the jurisdiction of one of the permanent boards unavoidably results in considerable embarrassment. The Council would therefore recommend that careful consideration be given to reports of recommendations for the creation of new committees.

SUB-COMMITTEES OF THE COUNCIL

As the second portion of its report, the Council submits the reports of its various sub-committees, whose work is of quite as much importance as that of the Council itself. It has seemed evident for some time past that one of the most important functions of this Council would be that it would form a center or hub around which would be gathered a considerable number of sub-committees, working on definite portions of the general field of the Council. The Council feels that the work of these sub-committees is of the utmost importance and recommends their reports to your careful consideration.

Respectfully submitted,

HENRY B. FAVILL, Chairman,
JOSEPH N. MCCORMACK,
WALTER B. CANNON,
HENRY M. BRACKEN,
WILLIAM C. WOODWARD,

FREDERICK R. GREEN, Secretary.

REPORT OF THE COMMITTEE ON THE PREVENTION OF BLINDNESS

To the Council on Health and Public Instruction:

During the past year the propaganda on ophthalmia neonatorum has been so widespread that in almost every state there have been papers read before county and state medical societies as well as a large number of popular addresses on this subject. It has been considered in the regular columns of many medical journals, as well as editorially, and the persistent efforts to arouse effective interest on the part of the medical profession to control an infection which is followed by such disastrous consequences, but which hitherto has not been controlled, has been most effective. The use of prophylactics has become general. Six states and many cities are now distributing a prophylactic gratuitously. In New York State during the past year 18,811 outfits, containing a 1 per cent. solution of nitrate of silver, with circular in English, Italian and Polish, were sent through the 1,600 health officers to both midwives and physicians. Indeed the seriousness of birth infections is now being so much more widely appreciated that the proportion of babies that have become blind from

this cause has largely diminished. The facts remain, however, that human nature is always the same, and no matter how complete may be the actual knowledge on the part of both midwife and obstetrician on the possibility of infection of the eyes at birth, there will always be those who are negligent and careless, as in every phase of human activity, and it becomes increasingly evident that unless stringent regulations are made and enforced children will be allowed to become blind whose eyes should have been saved. The same conditions obtain everywhere, in the most highly civilized and best regulated communities as in lumbering and mining towns, unless efficient sanitary regulations are enacted and enforced.

Perhaps the most effective object lesson of the past year, showing the practicability of the complete control of birth infections of the eyes, comes from Boston. In the revised laws of 1902, section 49 was introduced as follows:

Should one or both eyes of an infant become inflamed, swollen and red, and show an unnatural discharge at any time within two weeks of its birth, it shall be the duty of the nurse, relative or other attendant having charge of such infant to report in writing within six hours thereafter, to the board of health of the city or town in which the parents of the infant reside, the fact that such inflammation, swelling and redness of the eyes and unnatural discharge exists. On the receipt of such report, or of the same symptoms given by a physician as provided by the following section, the board of health shall take such immediate action as it may deem necessary in order that blindness may be prevented. Whoever violates the provisions of this section shall be punished by a fine of not more than one hundred dollars.

In 1910 this was further amended by the addition of sections 1 and 2, chapter 485, as follows:

Sec. 1. The State Board of Health shall furnish, free of cost, to physicians registered under the laws of the Commonwealth, such prophylactic remedy as it may deem best for the prevention of ophthalmia neonatorum.

Sec. 2. To carry out the provisions of this act there may be expended annually from the treasury of the Commonwealth a sum not exceeding twenty-five hundred dollars.

In 1911 this was further amended by the addition of chapter 643, which provides salaries for officials doing the work as well as for the prophylactic to be distributed. This law reads as follows:

The sums hereafter mentioned are appropriated for the salaries and expenses of the State Board of Health for the fiscal year ending on the 30th day of November, 1911, to wit:

For expenses in carrying out the provisions of the law relative to the prevention of ophthalmia neonatorum, a sum not exceeding two thousand five hundred dollars.

Ophthalmia neonatorum was made a notifiable disease by resolution of the State Board of Health on May 6, 1909.

The law passed in 1902 has been a dead letter. The doctors had generally disregarded the existing law and no board of health had ever instituted prosecutions to enforce it. Indeed until June 4, 1909, this disease was not even included in the State Board of Health's printed list of reportable diseases. The general attitude toward the matter according to the *Boston Common*, which is quoted by the *Boston Medical and Surgical Reporter*, was that of a physician, a graduate of one of the university medical schools, who, excusing his failure to report the disease called the child's resulting blindness "an accident, just as one sometimes stumbles on the stairs." The Boston Board of Health, however, cooperating with the State Commission for the Blind, called the attention of the physicians once more to the subject. A year ago, also, the State Board of Health sent out to each physician four separate notices of the reporting law. When this was not sufficient the Boston Board of Health instigated a test prosecution. A case was chosen which was not gonorrheal in origin and which did not result in blindness, and although both of these points were raised in the defense the court convicted the physician and the superior court sustained the decision on appeal. The month before the conviction the number of returns under the law had been ten; the month after the number was twenty. The next month, there being no prosecutions, the number fell back to ten, but in December new prosecutions were carried through and the returns rose during the next four months to 15, 32, 97 and 116 respectively. The last number seems to represent a fairly thorough enforcement of the law and the number is being maintained. It also gives some indications of the probable number of infections in cities of like population. The enforcement of the reporting law, however, is the least important part of the Boston Board of Health's preventive work. Every reported case of ophthalmia neonatorum is immediately followed up by a competent nurse who sees to it that proper treatment is given to the child and that, if necessary, it is sent to the hospital.

Since the institution of this "follow up" system in Boston, and this should appear in black-letter type, *not a single known case of the disease has resulted in blindness.*

Concerning this the secretary of the State Board of Health writes, under date of April 24, 1912: "I have just received your letter of April 22 in relation to ophthalmia neonatorum in this state and have called up the Boston Board of Health with the resulting information that 1,068 cases of ophthalmia neonatorum were reported to the Boston Board of Health last year. In the state, as a whole, there were 1,343 cases reported for the year ending Dec. 31, 1911.

The statement that no children have become blind in Boston since the following-up system was introduced is practically true, although Dr. Shea of the Boston board tells me that about two weeks ago, a case did occur in which it is probable partial blindness will result. The case was a long-drawn out one and the final result was due, apparently, to the fact that a recurrence took place after this case had been discharged from observation, and a period of two or three weeks elapsed during which no treatment was instituted.

Dr. Shea makes the very interesting statement that since the prophylactic has been distributed to physicians of the commonwealth, it is comparatively rare to receive at the city laboratory specimens of pus which show gonococcus, whereas before the distribution of the prophylactic such positive findings were common.

The vital, almost epoch-making importance of this record will be better understood and appreciated when read in connection with the conditions obtaining in the four preceding years, during which time the statistics and results of ophthalmia neonatorum have been observed.

	No. Under Observation	No. Made Blind or Partially Blind
1907-08	46	12
1908-09	116	29
1909-10	119	13
1910-11	107	11

The report continues:

"The most unexpected finding in the four years' study in Massachusetts has been the fact that the doctors and not the midwives are responsible for blindness from ophthalmia neonatorum. So far as the figures show, however, this is not because midwives have been careful while doctors have been careless, but because the midwife has appeared very little in the figures. Out of the 388 cases under observation, a midwife had attended the birth in only ten cases. Neglect was shown in three of these, a high percentage when compared with the percentage of neglect in cases attended by physicians.

"The doctors of Massachusetts, then, must be held responsible, and back of them are their medical schools. The public social institutions have been able to do much in the way of prevention, but much of their work is necessarily corrective, after the harm has been done. The institutions in the best position to do preventive work are the medical schools, and upon these should be placed the burden of that eternal vigilance which must always be the price of sight for the babies."

An almost precisely similar system has been adopted in New York, except that no prosecutions of physicians have been instituted. In the metropolis 40 per cent. or approximately 40,000 births annually are directed by midwives. They are, however, subject to the most exacting supervision; they are licensed only from year to year and after thorough medical inspection. One failure to report the existence of ophthalmia neonatorum when present is followed by a severe reprimand. For a second failure the license is revoked. In both cities, as indeed has now become general, a 1 per cent solution of nitrate of silver is distributed gratuitously to both midwives and physicians, that used in New York being most convenient and effective. It consists of a small paraffine ampule holding half a dozen drops of the solution, sufficient for both eyes for one case, but not enough to continue the treatment should such a temptation exist. In the cases reported from New York nearly twice as many infections are found in the practice of the physicians as of midwives. This is probably due to the fact that the penalties for neglect in the case of the latter have been more rigidly enforced. In the entire state of New York during the year 1911 but sixty cases of ophthal-

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mia neonatorum were reported to the State Department of Health.

An important document, Public Health Bulletin No. 49, which can be obtained by writing to the Assistant Surgeon General, Dr. J. W. Kerr, Department of Public Health and Marine-Hospital Service, Washington, on ophthalmia neonatorum, embodies a résumé of all of the laws and regulations in force in the United States relating to this subject. The subject is summarized as follows:

All of the laws in force contain one or more good provisions, such as those requiring birth reports, with reference to instructions in them regarding ophthaimia neonatorum; case reports to health authorities not only by midwives but also by physicians and parents; distribution of literature; instructions as to treatment; disinfection; furnishing of prophylactics; control over midwives; and medical attendance if the person is unable to pay. All of these provisions should be included in a uniform law, which is desirable in order to successfully contral ophthalmia neonatorum.

Unfortunately the activities of the sanitarian are too often restrained to pointing out the evils of ophthalmia neonatorum with no means at his disposal to combat them. It is society as a whole, in the last analysis, which must utilize the knowledge at its disposal and furnish the means to eliminate the disease. These are cheap and comparatively easy of application, but society must ultimately decide whether it is willing to pay the price.

It has become evident, therefore, that not only academically but actually birth blindness can be, and is being, stopped. It is necessary only that other communities should adopt like effective measures to give to the United States the proud preeminence of being the first nation to make good the prophecy of Cohn "that in all civilized countries ophthalmia neonatorum must and shall be wiped out," and to justify the conclusions voiced by Mr. Henry J. Wilson, secretary of Gardner's Trust for the Blind, when he says in the *London Chronicle* that the amount of blindness all over the world is gradually decreasing, and one of the most important agents in this beneficent result he considers to be the making of ophthaimia neonatorum a compulsory notifiable disease.

TRACHOMA

Another menace to the integrity of sight is trachoma. The importance of this has for many years been fully recognized by the federal government and no immigrant enters our ports without his having his lids everted and their condition examined. Its cause is not yet well known. It flourishes best where sanitary conditions are worst. It thrives in the hovels and congested tenements where the air is bad and the food of poor quality and insufficient. It is slow and insidious in its development, a mass of sago-grain elevations gradually fill in the retrotarsal fold limiting the lid movements and leaving the eye half closed. The infection is carried by means of the atrocious roller towel, which is still found in some primitive establishments, and by other methods of direct communication. The health departments of many cities have prohibited the use of roller towels; they should be forbidden anywhere. When once established trachoma is exceedingly difficult to control.

Notwithstanding the strenuous methods employed to keep it out it seems to have become firmly seated in certain sections of this country. The public eye clinics of Chicago are filled with patients showing the resultant deformities. Wilder, in a series of careful studies, located a center from which it seems to proceed in Southern Illinois. It has been found that the mountains of Kentucky and Tennessee are full of it, while in Oklahoma it has become a public menace.

In reply to an inquiry addressed to the Office of Indian Affairs, Department of the Interior, under date of Oct. 25, 1911, a letter says: "We have in the field four traveling experts in trachoma who devote their entire time to the treatment of the pupils of the Indian schools for this disease. We have compiled a number of statistics in regard to its prevalence among Indians, and the percentage ranges from zero to 75 per cent. in various schools in Indian communities. In many cases the disease is typical and mild, while in other communities it is followed by severe sequelæ resulting in serious impairment of vision, entropion and blindness in a large proportion of those suffering from this disease. A pamphlet has been issued by the United States government on trachoma.

As an example of the seriousness of this condition recent examinations by a government expert at the Indian stations in Oklahoma shows as follows:

At Shawnee	162 were examined	160 had trachoma
At Sax and Fox	130 were examined	77 had trachoma
At Otto	76 were examined	42 had trachoma
At Ponca	133 were examined	92 had trachoma
At Darlington	250 were examined	210 had trachoma

Despite the fact that the disease is assuming serious proportions and especially in Oklahoma, where the number of Indians is large, the government maintains but four nurses in the work and but two physicians. It is bad enough that such a serious state of affairs should have been permitted to obtain among the poor wards of the nation. It becomes alarming when we realize its possible extension to our own people, a catastrophe which has actually occurred, for still more recent reports show that almost 50 per cent of the white children in the public schools have become infected.

Dr. Daniel W. White, United States government eye and trachoma expert, recently examined the public schools of Pawnee, Okla., and found 48 per cent of the pupils affected with trachoma; and he estimates that all of the public schools of that state will show, on examination, that 20 per cent. to 40 per cent. of the pupils are affected with trachoma. He seems to think it very strange that its existence should be general and yet the medical fraternity of the state have not given it more serious consideration. Dr. White has made a close study of this disease all over the United States and has personally examined 100,000 Indians in Oklahoma, and found 70,000 of them affected. This does not include the general number of white people whom he has also examined in that state. The following are his exact figures:

PAWNEE, OKLA., Sept. 19, 1911.

A synopsis of eye examinations in the Pawnee, Oklahoma, public schools, by Dr. G. A. Landes and Dr. Daniel W. White, U. S. eye and trachoma experts.

Number of pupils examined	495
Number presenting trachoma	237
Number presenting no trachoma	159
Number of suspicious cases	58
Number of cases of conjunctivitis	42
Percentage of pupils with trachoma	59%+
Percentage of pupils having no trachoma	41%—
Percentage of suspicious cases	21%
Number of pupils presenting impaired vision due either to refractive errors or inflammation of the lids of the eyeballs	39
Percentage of normal eyes of total examined	32%
Percentage of trachoma	48%
Percentage of suspicious cases	12%
Percentage of conjunctivitis	8%

From these statistics it would seem imperative that measures be taken immediately by the federal government to supplement the able efforts of the few men who are now employed in fighting this disease in order that its extent may be determined and steps taken to prevent its spreading further.

INDUSTRIAL ACCIDENTS

Industrial accidents to the eyes constitute one of the common causes of preventable blindness. Many large interests have already inaugurated protective measures for their employees, in self protection as well as from motives of humanity. Safety devices are being more and more generally employed. In conversation with the chief claim attorney of the New York Central railroad a few weeks ago the fact was pointed out that the explosion of water and lubricating glasses was a frequent and preventable cause of eye injuries, and that this occurred because the glasses were of poor quality and improperly protected. That this was fully appreciated by the keen officials was shown when Mr. Whiting produced a chart on which the history of every accident was carefully noted, and the conditions which had produced it analyzed. He had already recommended that a new lubricating device should be put on all of the engines of the entire system at a cost of twenty-five thousand dollars. The management hesitated at the great expense, but when the next day a claim of seven thousand dollars was settled for the loss of an eye, the change was immediately ordered, and the future protection of the men assured. The possibility of making more general the wide-spread knowledge of this character in order that the other large interests may profit by such an experience, led to the formation of the American Association for the Conservation of Vision. This association is honored by having among its vice-presidents the president of the United States and other eminent citizens, and receives

the approval and financial support of the Russell Sage Foundation. It has for its object the preservation of the eyes of the nation. It recognizes the fact that the time during which effective care can be given is in the plastic period of school life, when from 30 to 32 per cent. of the children are found to have defective eyes, and it plans with the help of physicians, especially ophthalmologists, and sanitarians, with the aid of architects and illuminating engineers, of teachers and social workers, to study the conditions that are prejudicial to good sight and when possible to endeavor to have them corrected.

In a letter received from Mr. Leonard P. Ayers of the Department of Child Hygiene of the Russell Sage Foundation, he says:

"Two years ago, I made an analysis of some thousands of cases of physical examinations made in the elementary schools of New York City. Among the 7,608 cases examined, 1,411 were recorded as having defective vision. An analysis of these cases shows a distinct advance in the percentage of children having defective vision with each advancing grade and each advancing year of age." These results were as follows:

PER CENT. HAVING DEFECTIVE VISION BY AGES

Age	Per cent.
6	...
7	...
8	17.5
9	20.2
10	25.0
11	23.9
12	26.5
13	23.7
14	27.7
15	25.6

PER CENT. HAVING DEFECTIVE VISION BY GRADES

Grade	Per cent.
1	...
2	20.2
3	21.9
4	25.8
5	24.8
6	24.5
7	26.9
8	32.3

Percentages of defective vision at the ages of six and seven years are not given, because the pupils at those ages are, almost without exception, in the first grade, and, as they cannot write, they are not tested for defective vision.

Among the conditions which have developed by the long continued or excessive use of the eyes is myopia, which when it progresses produces complications of a most disastrous character. Concerning this, Hirshberg in his recent monograph just published on the treatment of shortsight, says: "My observations, especially in my private practice, and my carefully entered clinical records carried on for more than three decades, have given me the comforting conviction that by means of a long continued abstention from close work the stretching process which constitutes myopia can be so far arrested, indeed relatively speaking, it is by no means rare for it actually to be brought to a standstill—that further diminution of acuity will not occur. Heedless of all considerations of rapid advance in learning, he continues, as soon as he sees the first indication of these important changes he sets aside all ordinary school teaching for the next two years or replaces it by a special form of home training which should be oral in character and all copy-book writing and prolonged eye study entirely excluded. It will be evident then that our school methods in which the same curriculum is employed for those whose eyes have begun to fail and for those whose eyes are strong, must be modified. There should be special classes for those with defective eyes, or better still, the whole curriculum should be so modified as to limit the enormous amount of eye work which is now required from the adolescent.

BLINDNESS FROM WOOD ALCOHOL

The extent of blindness due to wood alcohol is everywhere in evidence. In a letter to the Committee on Prevention of Blindness of the New York Association for the Blind, Dr. May wrote:

"I believe that the adulteration of liquors with wood alcohol would cease if the guilty parties were aware of the serious consequences which result from such acts, and were instructed in the poisonous effects of this adulterant. In other words, a great deal of the adulteration is due, in part at least, to ignorance, and I do not believe that it would continue if the serious effects were generally known.

"Why would it not be a good plan to send a circular to every retail liquor dealer in the city (and elsewhere) with some such simple sentence as the following, printed in letters of large size:

"DO YOU KNOW THAT WOOD ALCOHOL IS A DEADLY POISON AND IS RESPONSIBLE FOR MANY DEATHS? AND THAT EVEN AS SMALL A QUANTITY AS A TEASPOONFUL HAS CAUSED BLINDNESS?"

There has been a marked decrease in the sale of this adulterant by reason of prosecutions carried on against saloon keepers and others under the initiative of the New York City Board of Health.

It would be desirable if some absolutely distinctive name were to be given to this toxic substance as the word "alcohol" is in itself misleading and leads the ignorant to think that it is a form of spiritous liquor. Its very name would be a prohibition to its use if it were called "Wood Poison."

It has been possible only to touch superficially and briefly upon certain important methods which are prejudicial to vision and which are easily controlled. To limit the preventable blindness this must be made

A NATIONAL MOVEMENT

There are many others of great importance in which as much can be done and with equally beneficial results. To summarize them; there should be a uniform law for the control of ophthalmia neonatorum in the different states, which should provide for the prompt notification of birth. The English system of thirty-six hours has proved to be effective. This is not the birth report, but merely, as the name indicates, a notification. It should include the names of the father and mother, the place of birth, sex of the child, the name of the child when it can be obtained, although this is not essential and should not delay the notification. This should also include the inquiry as to whether or not a prophylactic had been used against ophthalmia neonatorum (interpreted in midwives' certificates, "babies sore eyes") with the further inquiry "if not, why." This should be followed within ten days by the regular report of birth which can be made out more deliberately and which should include all of the facts usually required. The first notification makes it possible for the health board to follow up cases at a later date, which when done greatly increases the possibility of full reports being secured. It should provide for the reporting of the inflammation of the eyes of the new born when it exists, and with an adequate penalty for its neglect. It should provide for the distribution of a free prophylactic by the state with circulars of advice to midwives, mothers and others as to the dangers of ophthalmia neonatorum, the necessity of its immediate treatment and the legal requirements of its being reported. The embodiment in the law (where they do not exist) of provisions making ophthalmia neonatorum a reportable disease on the part of all attendants, medical or otherwise, and the enforcing of this requirement by prosecuting persons who neglect to observe the provisions of the law, promptly, and publishing the results of the prosecution. Moral suasion and educative measures are first necessary, but legal measures are imperative to make them successful. The vesting of authority in health officers, where it does not exist, to immediately provide proper treatment for infected cases as soon as they are reported. It is only by immediate care, which often is not secured, that blindness in babies so infected may be prevented. The initiative for all this work should be in the department of public health, but it must receive the general support of the medical profession and public in order to be made effective. The department of health should also require that the final conditions of children infected with ophthalmia neonatorum should be reported. It is only in this way that any actual knowledge of the extent of the injury done can ever be computed.

These measures can be secured only by the cooperation of attending physicians with the department of public health. With the midwife it is merely a question of executive efficiency. The welfare of every community from a moral as well as from a sanitary standpoint, demands that the circumstances associated with the birth of the child shall be officially known and properly recorded. The new born infant on its entrance into this world becomes an individual with personal rights and privileges, which may not be ignored. While the relationship of the attendant at birth is of a

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peculiarly personal nature there is at the same time a responsibility to society at large which is equally binding. It is precisely because of the helplessness of the individual at this period of his life—when his most precious possession is menaced, that of sight—that the law and the doctor, his natural and rightful protectors, must safeguard it for him. This can be done only by the law first planning the measures to be employed for his protection and by the doctor loyally sustaining them. There has been great objection on the part of some physicians to the first essential in saving the eyes of babies from the effects of ophthalmia neonatorum, that of making the disease reportable under penalty, because of the feeling that the morality of the parents was thereby impugned. But in only a portion, although it is large, of all ophthalmias of infancy is found the gonococcus. It is evident that this conclusion is by no means justified; but even if it were the sole infecting cause and the reports were open to public inspection, which they are not, how insignificant the temporary embarrassment of the mature adults, fully able to defend themselves, compared with the possible alternative of a life-time of blindness of an innocent individual who is at least equally worthy of consideration.

If ophthalmia neonatorum is to be abolished the initiative must be taken by the doctor until adequate laws are made and enforced. This should continue to be a subject for consideration and effective action by every state and county medical society.

The department of public health in conjunction with the department of public education should secure regular examinations of the eyes of all school children and when defects of the eyes exist that cannot be corrected with glasses suitable provision should be made for the instruction of those children without compelling them to submit to a curriculum which when followed means the destruction of their eyes. It would be possible to definitely plan a program for the protection of the eyes of the school children and to carry it into effect if a committee representing the American Medical Association and the National Education Association were to work conjointly toward this end. Advice as to school construction, determining of methods of examining the eyes of school children with recommendations as to special instruction for those with defective or diseased eyes could then be carried into effect with the result of saving many eyes that under present methods will assuredly be lost. The federal government should provide adequate measures for the investigation of trachoma throughout the United States and where it is found to exist, as it is a menace to the entire community, measures should be taken in conjunction with the local authorities for its control as is done in the case of any other serious infectious disease. These and many other measures for the prevention of unnecessary damage to the eyes is planned by the American Association for the Conservation of Vision and it is hoped that in conjunction with the state medical societies and health boards to initiate measures which will in the near future do much to limit the development of unnecessary blindness and serve as an important agent in the conservation of human eyes.

Respectfully submitted,

F. PARK LEWIS,
J. CLIFTON EDGAR,
F. F. WESBROOK,
GEORGE E. DE SCHWEINITZ,
THOMAS S. HOLLOWAY,
CASEY A. WOOD,
JOHN GREEN,
CLARENCE LOEB,
WILLIAM CAMPBELL POSEY,
MARK D. STEVENSON,
Committee on Prevention of Blindness.

REPORT OF THE COMMITTEE ON VISUAL STANDARDS FOR PILOTS

To the Council on Health and Public Instruction:

In the report tendered to the Council last year, the Committee felicitated itself upon the adoption of the visual standards which they had presented to the Department of Commerce and Labor to determine the fitness of applicants for license as master, mate or pilot in the federal marine. By order of the secretary of the department, Hon. Charles Nagel, these standards went into force on July 1, 1911, and for the first time in the history of the government the officers of the Marine-Hospital Service had a definite standard to guide them in their recommendations for appointment or rejection of candidates to the supervising inspectors of steamboats.

It soon became apparent, however, that the new order was creating considerable dissatisfaction among pilots and others affected by the new standards, for it was ascertained that a number of those who had been long in service did not possess sufficient visual acuity to enable them to pass the tests required for the renewal of license.

Under the old régime, there was but one test made, i. e., that for color blindness, when candidates were applying for their original license, and the department demanded no reexaminations. On account of the likelihood, however, of visual deterioration, either for form or color, in consequence of age or disease, the new standards required reexaminations every five years, when all licenses are renewed, although the visual acuity required at this test was lower than that demanded for the original license, being in the opinion of the committee the least amount of vision a pilot might have to enable him to be a safe navigator.

Being debarred from the service by their failure to pass the visual tests demanded for the renewal of the license, the rejected officers, as was natural, exerted every effort to have themselves reinstated, and securing the cooperation of the organizations with which they were connected and the sympathy and support of prominent navigation boards in some of our largest ports, appealed to the Department of Commerce and Labor to have the new standards set aside. In response to their request, the Department of Commerce and Labor appointed a day to hear the complaints and consider the protests, and requested the attendance of the Committee at this hearing for the purpose of giving the Board of Supervising Inspectors, under whose auspices the hearing was heard, "the benefit of your valuable assistance in its efforts to establish and maintain a standard of vision that will be sufficiently high without being unnecessarily restrictive or distressing."*

Your Committee accordingly appeared at the conference in Washington on Jan. 24, 1912, and explained to the Board of Supervising Steamboat Inspectors and to the pilots and marine officers present, as well as representatives of shipping interests from various cities, that in requesting the adoption of suitable standards to govern the examination of pilots' eyes, the American Medical Association was actuated purely by disinterested motives, and that the sole aim of the Association was to protect lives and shipping, that the standards were as low as was consistent with safety and that reexaminations were necessary on account of the deterioration of vision which sometimes happens in consequence of age and disease. Your Committee was accorded a respectful hearing and it was hoped that the Department of Commerce and Labor might be persuaded to stand firm and adhere to the standards which they had put in force. Shortly afterward, however, i. e., Feb. 23, 1912, the Committee was informed that although the standards demanded at the examination for the original license would still be maintained, the tests for visual acuity at the time of the renewal of license had been dispensed with, though the candidates would be tested for color at that time and a normal color sense required. The order issued by the Department of Commerce and Labor being as follows:

WASHINGTON, Feb. 23, 1912.

U. S. Supervising and Local Inspectors, Steamboat Inspection Service and Others Concerned.

Gentlemen:—In order that there may be no delay incident to putting into effect the new rule in regard to visual examination, you are advised that the following resolution was adopted by the Board of Supervising Inspectors on Feb. 20, 1912, and approved by The Honorable, the Secretary of Commerce and Labor, on Feb. 23, 1912:

"*Resolved*, That section 48, Rule V of the general rules and regulations prescribed by the Board of Supervising Inspectors as amended January, 1911, be struck out and the following substituted therefor:

"48. No original license as master, mate or pilot of any vessel propelled in whole or in part by steam, gas, fluid, naptha, alco-vapor, electric, or other like motors, or master or mate of sail vessels, shall be issued except upon the official certificate of a surgeon of the Public Health and Marine-Hospital Service respecting the vision of the person applying for such original license. The word 'original' as contemplated in this rule shall mean the first license of any character issued to a master, mate or pilot, and shall not be held to mean, for instance, that a license issued to a master who was previously

* Quotation from a letter to the chairman of the committee from Secretary Nagel.

licensed as a mate or pilot shall be considered an original master's license.

"No license as master, mate or pilot of any class of vessel specified and enumerated in the foregoing paragraph shall be renewed except upon the official certificate of a surgeon of the Public Health and Marine-Hospital Service that the color sense of the applicant for renewal is normal. Where an applicant for renewal of license is situated so that it will put him to great inconvenience or expense to appear before a surgeon of the Public Health and Marine-Hospital Service for examination, the certificate of a reputable physician or oculist as to the color sense of the applicant will be accepted in lieu of the certificate of the surgeon of the Public Health and Marine-Hospital Service.

"Any person who received a license prior to the adoption of the rule demanding a visual examination may have such license renewed for daylight navigation only, if no other bar to such renewal appears.

"Any person holding a license as mate on steamers navigating waters flowing into the Gulf of Mexico and their tributaries issued prior to 1905 may have such license renewed without being subjected to the examination for color sense.

"Any applicant for renewal of license who has been refused such renewal on account of the requirements of section 48, rule V, respecting visual acuity and color sense, as amended in January, 1911, may apply for renewal of license under the provisions of the foregoing section, and nothing herein contained shall debar an applicant who has lost the sight of one eye from securing a renewal of his license, providing that his color sense is normal."

Respectfully, GEORGE UHLER,
Supervising Inspector General D. N. H.

The Committee regrets that the Department of Commerce and Labor was compelled to recede from its ruling of January, 1911, when all of the recommendations of the Committee were accepted, for as the matter now stands there is nothing to debar a marine officer from continuing his duties after he has once qualified at the original test, even if in after years his vision becomes seriously compromised. The insistance on normal color perception at each test for renewal of license and the maintenance of the standards for original license as suggested by the Committee, are, however, of signal importance and unquestionably will do much to lessen the dangers of navigation.

Owing to the disturbance in maritime circles created by the standards just referred to, to govern federal marine officers, the Committee deemed it unwise to take active measures for the enforcement of similar standards in the case of state or branch pilots. These pilots, as explained in the original communication of the Chairman of the Committee to the Council, are not under the jurisdiction of the federal government, and are amenable only to the laws of the various states. Although in charge of the pilotage of all vessels to and from foreign ports, they are subjected to no proper ophthalmological tests whatsoever, all the examinations being conducted by laymen, and it is believed that many possess neither sufficient visual acuity or accuracy in the discrimination of colors to enable them to perform the duties of pilots satisfactorily at all times.*

Although, as already expressed in its previous report, the Committee realizes that by reason of political influence the task of compelling these pilots to submit to a proper visual examination will be most difficult, they feel, nevertheless, that a determined effort must be made to force the enactment of such laws as will eliminate all with defective color or visual sense from the public services.

Should a bill recently introduced into Congress which aims to bring this class of pilots under federal control become a law, the solution of the problem will be found, as state pilots would then be examined by the Marine-Hospital officers under the standards put in force at the instance of this Committee. The Committee is endeavoring to aid the interests in charge of this bill in its passage through Congress and desires the approval and support of the Council in this undertaking.

The recent disaster to the *Titanic* has shown the dreadful inefficiency of government requirements to safeguard the lives of travelers on the water. To commit the lives of thousands absolutely into the hand of pilots, who determine in large measure for themselves whether they are physically properly capacitated to do so, is in the opinion of the Committee most reprehensible.

* Two Delaware river pilots in active service have been proved to be color blind by three competent ophthalmologists.

Your Committee desires its continuance for another year, therefore, for the purpose of furthering such plans as may insure in each pilot the chief requisites of his profession, good sight and normal color perception.

WILLIAM CAMPBELL POSEY, Chairman,
Philadelphia, Pa.
WILLIAM H. WILMER,
Washington, D. C.
CHARLES H. WILLIAMS,
Boston, Mass.

REPORT OF THE COMMITTEE FOR PUBLIC HEALTH EDUCATION AMONG WOMEN

To the Council on Health and Public Instruction:

First, we wish to thank the women and the men who have done the work, some of the details of which are set forth in the following report. We are sorry that at best the report is partial and a very inadequate statement of results; while the time, skill and labor represented by the year's work have received no mention at all. Keeping accurate records of many speakers, subjects and audiences demands clerical work and consumes time which in most instances has of necessity been given to planning and execution instead.

This Committee was appointed three years ago to take the initiative among women's clubs and similar organizations in public education for the prevention of disease. Dr. Rosalie Slaughter Morton, the first chairman, and her co-workers enlisted the interest of women of the American Medical Association in forty-four states, the District of Columbia, Alaska, Panama and Hawaii. Upon this foundation we have sought to build.

There are now remaining three states unorganized. In two of these there are no women members of the American Medical Association. In Delaware there are but five women physicians, in Louisiana women are not admitted to the county societies and therefore cannot have membership in the American Medical Association. Since the adoption by the Council of the resolution making possible the appointment of men on this Committee some of the obstacles to organization have been removed. The chairmanships of Nevada, Montana, South Dakota and Rhode Island are now filled by men and we hope to secure the interest of men in the states still unorganized.

In accordance with the resolution of the Council, as far as possible an effort has been made to secure committees on public health education in the state societies with the state chairmen under this committee as members and similar committees in the county societies, making the chairmen of such committees the county chairmen under this committee. A few more states than last year and many more counties are now so organized and the question will be discussed at more state meetings this spring. At the same time an effort has been made to secure committees on health and hygiene, with physicians as members or advisors, in the women's clubs, Young Women's Christian Associations, Young Men's Christian Associations and similar organizations of men and women. This Committee, by assisting in the arrangement of programs and securing speakers, then becomes the medium of communication between the people and those physicians who are willing to give public instruction in matters pertaining to health. For this purpose 10,000 leaflets presenting for consideration fifty-nine topics have been distributed.

Between July 1, 1911, and April 1, 1912, talks were given to approximately 3,342 audiences not including 935 audiences of school children, or forty-seven series to the public and six series to school children. In many instances no record of attendance has been kept so that any statement is unfair. Thirteen states report 13,634 men and 55,190 women. Twenty-five states report an approximate total of 119,637 exclusive of school children and series. It has been impossible to observe the recommendation of the Council that the work be primarily among women if that statement is to be interpreted to mean that talks to men are to be excluded. Organizations of men appeal to the education committees of the county societies for assistance as do the organizations of women. Since those committees have been appointed for public education such requests cannot be refused.

The plan of this Committee is to take the initiative where no work is being done for the prevention of disease and to aid existing efforts in communities already interested in health subjects. For this reason much of the work for this Committee has been done in connection with other organizations and must be reported with them.

Work to which we wish to call especial attention has been done in the following states: In California the state chair-

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man, who was also state bacteriologist, sent out the Bacteriological Instruction Outfit loaned by the State Board of Health to schools, clubs and hospitals. In Connecticut the chairman of Fairfield County, who is Inspector of Public Schools in Bridgeport, is using her office to teach hygiene in the schools with the purpose of encouraging the board of education to introduce that study into the regular curriculum, and at the same time is extending her instruction into homes through the school nurses. In the District of Columbia an educational department is being conducted with the Women's Clinic under the auspices of this Committee and the directors of the clinic. The colored people as well as others are receiving instruction. When we consider the crowding of colored people in their own houses and their close relation with the family life of the conventional home in the United States this seems a commendable step in prevention of disease.

We would call attention also to the work of this Committee in Iowa, where together with the Congress of Mothers a plan for a baby's health contest has been elaborated. By this means attention of parents is called to physical defects in the child at the earliest possible age, and advice about care finds its way into most inaccessible homes. In Nevada where people are widely scattered pamphlets have been circulated as freely as obtainable funds would allow, and a plan for celebration of Health Day in the schools and churches has been elaborated. In New York even in the smaller cities, series of public lectures are a prominent feature. In Oklahoma the school children are being organized into a Keep-Well-Army in which they will be taught common facts of hygiene. The membership dues in this army will be used to support a state hospital for crippled children whose friends will thus learn that disease can be cured. In Montgomery County, Ohio, the Committee has for two years had supervision of books on health subjects put upon the shelves in the public library. In Tennessee this Committee with the State Federation of Women's Clubs has aroused the interest of the state officials in the sanitary condition of the state prison, and an effort is on foot to exterminate tuberculosis in that institution.

Education through the Farmers' Institutes has been more widely extended than last year but is capable of further development.

In many places Health Day has been observed very successfully in the public schools and in churches.

Through the influence of this Committee, in many states the medical societies either state, district or county have held open meetings for the consideration of health subjects. In many states, also, the newspapers have been willing to publish health articles if signed. There is a growing willingness to give full reports of open meetings.

We wish to thank those physicians who have been willing to write articles for publication. We have tried to make their kindness count for as much as possible by sending them to be reprinted in parts of the country widely separated. We thank especially the publisher of the *Minnesota Journal-Lancet* for sending to our state chairmen for republication copies of articles originally published in that journal.

We wish to thank the Sub-Committee on Medical Literature for their careful work in personally reviewing large numbers of books that the titles of helpful ones might be added to those already selected. To meet the demand for knowledge of such books the bibliography will be bound under separate cover.

We wish to thank the Committee on Cooperation for the large correspondence carried on with regard to twenty conferences and with the sixty-seven organizations affiliated with the Charity Organization Department of the Russell Sage Foundation which have to do with public health.

We wish, also, to thank medical societies and other organizations and individuals not only for their cooperation but for generous aid in the financial support of this movement as well as for the use of audience rooms. The expense for speakers and other arrangements for meetings has in every case been borne locally.

To give permanence to the work and to free it, so far as possible, from dependence upon individual enthusiasm we plan for the coming year to continue the effort to secure committees in state and county societies and in organizations of the laity. We plan to try to spread more widely through the press authoritative statements concerning the prevention of disease, and to make available in all states means of education which are found most successful in any.

Respectfully submitted,

ELEANORA S. EVERHARD, Chairman.
GERTRUDE FELKER, Secretary.

REPORT OF THE COMMITTEE ON COOPERATION WITH THE NATIONAL EDUCATIONAL ASSOCIATION

To the Council on Health and Public Instruction:

The Committee on Cooperation with the National Educational Association begs to report that the entire membership attended the meeting of the Council of the National Educational Association, held at St. Louis, Feb. 26 to 28, 1912.

On Tuesday, Feb. 27, 1912, the joint committees—that of the American Medical Association and that of the National Educational Association—unanimously adopted the following resolutions for presentation to the Council:

WHEREAS, There has been throughout the country an awakening to the health needs of school children, and

WHEREAS, The numerous forward steps already taken would help each school and community, if made available, and

WHEREAS, Present experience and present needs are not now available for want of that comprehensive study for which this committee was appointed, and

WHEREAS, this committee has been assured the continued cooperation of the U. S. Bureau of Education and of other distinguished bodies, able to assist effectively, and

WHEREAS, the preparation of constructive report which will bring together and make universally available the best results and methods in country and city schools, will involve expense for investigation, clerical work and publicity; be it therefore

Resolved, That an initial appropriation of $1,600 be requested of the National Council of Education for a first report on health aspects of school environment and equipment and for promulgating other helpful suggestions.

For the Committee:

THOMAS D. WOOD, Chairman
JACOB A. SHAWAN,
ALBERT E. WINSHIP,
JOHN F. KEATING,
PHILANDER P. CLAXTON,
WILLIAM H. ALLEN, Secy.

Committee of the A. M. A.

R. W. CORWIN, Chairman,
JOHN M. DODSON,
M. J. ROSENAU,

On Wednesday, February 28th, Professor Keating presented the above resolutions at a meeting of the Council and they were unanimously and enthusiastically passed by that body. They are finally to be acted upon by the N. E. A., at their next meeting, July 6-12, 1912, at Chicago.

It was suggested by the joint committee that the same sum, $1,600, be asked of the A. M. A. as asked of the N. E. A., for the purpose of defraying expenses of carrying on the campaign of education.

It gives your committee pleasure to add that the Council from the N. E. A. is most heartily in sympathy with this movement and that every member of the committee of the N. E. A. was enthusiastic in believing that much good will be accomplished in teaching health sciences in the public school.

Your committee feels that its work has been successfully launched and if followed as it should be that much desired good will be obtained.

Very respectfully,

R. W. CORWIN, Chairman.

REPORT OF THE COMMITTEE ON UNIFORM REGULATION OF MEMBERSHIP

To the Council on Health and Public Instruction:

The Committee on Uniform Regulation of Membership has held two meetings during the past year to discuss the best methods for the uniform regulation of membership in state associations. In order to bring the work of this committee before the members of the House of Delegates, a brief review of the work of previous years seems advisable.

This committee was created by the action of the House of Delegates at the Chicago session in 1908, following a recommendation in the report of the General Secretary that a committee be created "to secure data regarding the present provisions of the constitution and by-laws of the various state associations, as well as the procedure followed by state and county secretaries, and to report the findings and recommendations of the House of Delegates." At the Atlantic City session

in 1907, this committee made an extended report, tabulating data from all of the state associations under the following heads:

(a) Fiscal year.
(b) Dues.
(c) Method of handling suspended members.
(d) Recommendations as to best method of handling membership matters.

In addition, the report contained a considerable amount of tabulated matter regarding membership conditions in different parts of the organization.

The committee recommended:

1. That all state associations be requested to make their fiscal year conform to the calendar year and to request the component county societies to adopt the same rule.

2. That the committee be continued and that four state secretaries be added to it.

The recommendations of the committee were adopted.

At the St. Louis session in 1910, the committee, in addition to other matters referred to it, further recommended that rules be adopted by all county and state associations providing that membership shall be good for one year only, i. e., that the roll for each county and state association be made up each year, to include as members in good standing, only those who have paid their dues on or before a certain date, thus doing away with suspended members, and members not in good standing, and providing simply for members and non-members. The committee also recommended that a uniform system of records be devised to be prepared by the American Medical Association for the use of such county and state societies as wish to adopt it. The report was adopted, and the committee continued.

During the next year, the committee was placed under the newly organized Council on Health and Public Instruction. At the Los Angeles session in 1911, the committee asked that it be continued and that the Trustees be requested to make a sufficient appropriation for the committee to hold two meetings at the headquarters of the Association. This report was adopted.

Accordingly, a meeting of the committee was held on December 9 and 10, 1911, at the Association headquarters. After a full discussion of the entire problem, the committee unanimously adopted the following recommendations:

1. That the fiscal year of component and constituent societies should begin January 1 and end December 31, and that all annual reports from component county societies, including the names of officers, delegates and the roster of members for the ensuing year, together with the state per capita assessments, should be in the hands of the state secretary on January 1 of each year.

2. That it was advisable to devise and adopt uniform application blanks, receipt blanks, membership cards and transfer cards.

3. That all constituent state associations should hold charters from the American Medical Association.

4. That a uniform plan for the transfer of members from one component county society to another was necessary for the good of the organization.

After careful discussion, the following plan was worked out in harmony with the plans of the Judicial Council for procedure in disciplining members:

PROPOSED PLAN FOR UNIFORM TRANSFER OF MEMBERS

1. Transfer card issued by Secretary of Transferring Society.

2. Transfer card deposited with Secretary of Receiving Society and accepted by Receiving Society.

Or transfer card deposited with Receiving Society and rejected.

3. Transfer card and application referred to Board of Censors of Receiving Society for investigation by them, according to Chapter 4, Section 2 of the Constitution and By-Laws for County Society, to report in writing reasons for rejection of applicant. Report of Board of Censors with transfer card and copy of the record to be forwarded at once to the Secretary of the Transferring Society.

4. Transferring Society sustains action of Receiving Society and orders membership of transferred member cancelled.

Or Transferring Society does not sustain action of Receiving Society. In this case, the Secretary of the Transferring Society shall forward all papers in the case, with statement of its position to the Secretary of the Council of its constituent State Society.

5. State Council after consideration (A) sustains action of Receiving Society and orders Transferring Society to cancel membership. (B) Transferring Society refers the case to Council of State Society to which Receiving Society belongs.

6. State Council of Receiving Society disapproves action of County Society and orders applicant accepted.

Or State Council upholds action of County Society in rejecting application and so reports to State Council of Transferring Society.

7. State Council of Transferring Society must either (A) accept decision of State Council of Receiving Society and order County Society to cancel membership, or (B) appeal to Judicial Council of the American Medical Association.

A second meeting of the committee was held at the Association headquarters on March 30, 1912. The committee approved of three uniform blanks for county and state societies, viz.:

1. Uniform receipt book for county secretaries.
2. Uniform pocket card for state secretaries.
3. Uniform transfer card.

The committee also recommended that county societies be requested to hold their annual meetings during October, and that the newly elected executive officers (not including delegates), should assume office on January 1 following.

In view of the importance of the proper regulation of membership matters for the good of the Association, and of the widely differing customs that have been followed heretofore in the various state associations, it seemed advisable to the committee that the entire question of membership, its method of regulation and its bearing on the work of the organization, should be thoroughly discussed by the executive officers of the various constituent state associations. The growth and development of the Association and its various parts during the past sixty years has been largely accidental, rather than in accordance with any carefully planned system. A thorough understanding of existing conditions, and of the relations of the various parts of the Association to each other on the part of the executive officers of the state associations, is, in the opinion of the committee, of the utmost importance.

The committee, therefore, recommends that a meeting of the secretaries of the constituent state associations be called in Chicago some time during the fall of 1912, and that the Board of Trustees be requested to appropriate a sufficient amount of money to pay the traveling expenses of the state secretaries in attending this meeting, and that the recommendations of this committee as contained in this report be approved by the House of Delegates and that the committee be instructed to present these recommendations to the state secretaries for their approval and adoption.

Respectfully submitted.

DR. THOMAS MCDAVITT, Chairman.
DR. E. J. GOODWIN,
DR. E. W. WEIS,
DR. CLAUDE A. THOMPSON,
DR. JOSEPH H. MARTIN,
DR. F. R. GREEN, Secretary.

(To be continued)

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Book Notices

MILK AND THE PUBLIC HEALTH. By William G. Savage, B.Sc., M.D., D.P.H. Cloth. Price, $3.25 net. Pp. 459, with illustrations. New York: Macmillan Company, 1912.

The student of hygiene and preventive medicine will welcome a book which covers the sanitary aspect of milk-supplies. The literature on milk and its relation to the public health is enormous and is difficult to assemble from all sources. This book is an important contribution and stands alone as a text- and reference-book on the subject of milk and the public health. Little pretense is made of taking up the chemical side of the question; the sanitary condition of milk can be judged only by bacteriologic investigation and this forms the fundamental idea underlying the book.

The arrangement is systematic and logical. The first part discusses in an introductory chapter the chemical and cellular content of milk. The sources of bacterial invasion, the kinds of bacteria and their influence on milk are then taken up and finally the all-important relation of milk to disease. The presentation of the subject is clear and concise. But even here, as in so many other publications, the confusion of names of lactic acid bacteria is not wanting. The choice of

names for these organisms—*B. acidi lactici* and *B. lactis acidi*—has led to many errors and misquotations. Such confusion should be avoided with scrupulous care.

The second part gives particulars of the bacteriologic examination of milk. The methods are given in logical sequence and the opinions of advocates of different methods are detailed with impartiality. Several advances over older methods are recorded and the desirability of uniformity in laboratory procedures emphasized. The statement, however, that "the usually harmless lactic acid bacilli do not grow, or at least not readily, at 37 C." is not correct, and the fact seems to be overlooked that the common lactic acid bacteria are derived from cow manure. The author ably defends the opinion that bacterial examinations of milk are not sufficient, but should be worked hand in hand with sanitary inspection. This point cannot be emphasized too strongly.

The third part deals with the public health control of the milk-supply. The author writes chiefly of conditions in England. A good deal is also said of the movements for a betterment of milk-supplies in this country, including a clear presentation of the work of medical milk commissions and their influence on the general supply. Pasteurization of milk is warmly advocated as a measure of at least temporary importance.

The book contains many valuable tables and the illustrations are of high quality. A book of this nature and merit is invaluable as a text-book for students in sanitary science and will, it is confidently expected, find a large circle of readers.

HEREDITY IN THE LIGHT OF RECENT RESEARCH. By L. Doncaster, M.D. The Cambridge Manuals of Science and Literature. Cloth. Price, $0.40 net. Pp. 143. New York: G. P. Putnam's Sons, 1911.

This volume in the series published as the Cambridge Manuals of Science and Literature is a concise but clear sketch of the problems of variations and heredity. The chapter on the statistical study of heredity is as simple an exposition of the biometrical method of Galton and Pearson as can be given. The chapters on Mendelian heredity give the most important features of Mendelism in a clear and easily comprehended manner. The application of the conclusions drawn from the study of heredity in general to the problem of heredity in man are made with logical frankness. For example, "if, as the study of heredity suggests, though it would be rash to say it is proved, man is almost entirely the product of inborn factors which are little affected by environment, then improved conditions may only encourage the propagation of the degenerate and the race as a whole may go back rather than forward. Responsible students are not lacking who maintain that this is already taking place. . . . Some restriction on the reproduction of the mentally deficient is undoubtedly demanded by modern knowledge of heredity."

The author furnishes a good literary list and a short and valuable glossary.

The book can be commended to those who regard the practical problems of heredity as the foundation for eugenics and wish to keep in touch with the rapid advance of the last twelve years but cannot go to the original sources of information.

LEHRBUCH DER KYSTOSKOPIE UND STEREOKYSTOPHOTOGRAPHISCHER ATLAS. Von Dr. S. Jacoby. Cloth. Price, 25 marks. Pp. 248. With 48 stereoscopic views and 121 illustrations. Leipsic: Dr. Werner Klinkhardt, 1911.

There is a tendency at present to visualize in the teaching of all branches of medicine and surgery. This is indicated by the numerous atlases used in the study of anatomy and stereopticon views of dissections on the living and dead. This book has much more text than the ordinary atlas and many plates of figures illustrating different conditions in the bladder. There are 243 pages of profusely illustrated text and forty-eight plates of views of the bladder under different conditions, showing the appearance of pathologic conditions of the bladder.

The first four chapters deal with the history of the cystoscope and the principle on which it is founded, with a description of the Nitze cystoscope and its numerous modifications, with stereocystoscopy and electric arrangements necessary for the practice of cystoscopy. These matters are considered at considerable length and, while a thorough knowledge of the cystoscope is necessary before cystoscopy can be successfully practiced, these chapters might be abridged to advantage.

Chapter 6 deals with cystoscopic technic, the indications for cystoscopy, and the method by which complete and satisfactory cystoscopy should be performed; Chapter 7, which is especially good, deals with the cystocopic appearance of the bladder, discusses its normal color, the appearance and arrangement of the vessels, the shadows and folds of mucous membrane, etc.

One chapter is devoted to catheterization of the ureters and is one of the most valuable in the book. Here are considered the methods of obtaining urine from each kidney, indications and contra-indications of ureteral catheterization, the source of errors in ureter catheterization, uretero and pyelography, and functional kidney diagnosis.

While somewhat technical the book could be read to advantage by the general practitioner, as it discusses in a most satisfactory way the value, indications, contra-indications, the sources of error, etc., of each procedure taken up for discussion. For the specialist engaged in cystoscopy it is a book that can hardly be dispensed with.

A POCKET ATLAS AND TEXT-BOOK OF THE FUNDUS OCULI. With Note and Drawing Book. Text by G. Lindsay Johnson, M.A., M.D., F.R.C.S. With 99 drawings from life by Arthur W. Head, F.Z.S. Cloth. Price, $2.50. Pp. 205. Chicago: F. A. Hardy & Co., 10 S. Wabash Avenue.

So much of general as well as special interest is to be learned from the examination of the fundus oculi that no physician nowadays is fully equipped for his work who cannot use the ophthalmoscope. This little hand-book, which can easily be carried in one's coat pocket, is intended for the use of the beginner in ophthalmoscopy and fulfils its purpose well. One finds much more mathematical optics than is necessary for a practical understanding of the use of the instrument, but the very lucid anatomic and pathologic descriptions will be a great aid to the student in the comprehension of what he sees. There are twenty-eight colored plates showing fifty-five fundus pictures, each accompanied by a case history. While some of the pictures are a little sharp and glaring, they are, as a whole, wonderfully true to nature, and much better than those frequently found in more expensive manuals. In the effort to make the work as concise as possible some things have been omitted which one would expect to find, but on the contrary there are many helpful hints from the author's extended experience which are not to be found elsewhere. One finds little of importance to criticize. Not all will agree with Dr. Johnson when he says that "albuminuric retinitis is by far the commonest of all retinal affections." It would be better to say that sclerosis of the retinal vessels and the changes in the membrane itself resulting therefrom are far more commonly seen in American patients. A convenient note- and sketch-book is bound up with the atlas for the use of the student and practitioner in the dark-room in making notes and sketches of his own cases.

STUDIES IN PSYCHIATRY. By Members of the New York Psychiatrical Society. Volume 1. Nervous and Mental Disease Monograph Series No. 9. Paper. Price, $2. Pp. 222. New York: Journal of Nervous and Mental Disease Publishing Company, 1912.

This, the first volume of the "Studies in Psychiatry," consists for the greater part of a reproduction of articles written by members of the New York Psychiatric Society, each worth preserving in permanent form under book covers. In order to give the reader an idea what he may expect to find in this book, it would be necessary to reproduce the entire table of contents. Without underestimating the worth of some of the other articles, however, we may especially mention Dana's article, "The Curability of Early General Paresis;" Adolph Meyer's "Remarks on Habit Disorganizations in the Essential Deteriorations," and "The Relationship of Hysteria, Psychasthenia and Dementia Præcox;" August Hoch's article, "Constitutional Factors in the Dementia Præcox Group," which is rapidly becoming a classic; likewise the lucid description of cyclothymia, by Jelliffe; and the two

splendid articles on the "Eye Findings in Dementia Præcox," by Tyson and Clark. These studies combine the valuable features of the clinical lecture with those of the original article. It is quite refreshing to turn to these studies, written in good English and entirely free from colloquialisms, after having perused the raw clinical lecture, taken down in shorthand and printed without revision. The choicest thoughts clothed in the most becoming garb are not too good to apply to the intricate problems in psychiatry. And as the articles reproduced in these studies present the best thoughts of the best men in the best possible language, they can be safely recommended to all who are interested in psychiatric literature.

HANDBOOK OF MENTAL EXAMINATION METHODS. By Shepherd Ivory Franz, Ph.D.; Scientific Director and Psychologist, Government Hospital for the Insane. Nervous and Mental Disease Monograph Series No. 10. Paper. Price, $2. Pp. 165, with illustrations. New York: Journal of Nervous and Mental Disease Publishing Company, 1912.

This little book constitutes a valuable addition to the many meritorious monographs already published by this company. The methods of examination described by the author are those utilized in the best psychopathic hospitals. His selection is a judicious one, complex methods requiring the use of expensive instruments and a special laboratory having been omitted. Careful perusal of the book forces the conviction that the author was compelled to consult many volumes and diverse articles scattered throughout the literature; and he has succeeded in compressing this enormous material into the small space of 165 pages. The entire subject is presented under the following headings: "Sensation," "Movement," "Speech and Aphasia," "Attention," "Apprehension and Perception," "Memory," "Association," "Calculation Tests," "Time of Mental Processes," "General Intelligence," and "General Examination and Methods of Dealing with Observational Data." Each chapter is followed with a well-selected number of references, enabling the reader to pursue the subject still further. This monograph will be of immense value to the neurologist and psychiatrist. It would be futile to criticize this work, as it is without a doubt the best short book on the subject of mental examination methods written in any language. The clear presentation of the difficult subject-matter is to be especially commended, for things are so simplified that any intelligent reader may, after a single reading, apply the various methods of examination in his actual practice.

DIE HARNSTEINE: IHRE PHYSIOGRAPHIE UND PATHOGENESE. Von Dr. Otto Kleinschmidt, Volontär-Assistenten der Chirurgischen Universitäts-Klinik zu Königsberg i. Pr. Mit einem Vorwort von L. Aschoff, Freiburg i. Br. Paper. Price, 20 marks. Pp. 88, with illustrations. Berlin: Julius Springer, 1911.

This monograph of eighty-one pages deals exclusively with urinary calculi. The first nine pages are devoted to a consideration of the history of urinary calculi and of the theories, such as those of Ebstein, Lichtwitz, Kukula, Jores, which have been advanced to explain their formation. Considerable attention is devoted to the chemical composition of the stones and the relation of their chemical composition to gross appearance.

The book deals most satisfactorily and comprehensively with the present status of calculus formation and could be used to advantage as a reference book. Following the text are sixteen colored plates illustrating the color and composition of the various stones.

THE CONQUEST OF NERVES. By J. W. Courtney, M.D. Cloth. Price, $1.25. Pp. 209. New York: Macmillan Company, 1911.

In this small volume the author has furnished the general reading public another literary, if not scientific, contribution to the subject of "nerves." He takes up the several cults and healing-fads and attempts to show that where cures have actually been accomplished that this was made possible only through the instrumentality of "self." In his preface the author wishes us to know that "the object of this modest little volume is to fulfill that most important teaching function which the busy doctor is, unfortunately, too often forced to neglect. Hence, it is the author's most earnest desire that it should come into the hands of individuals with 'nerves,' at that critical moment when, with faith in the curative power of orthodox medical science dead and that in themselves fast dying, they ordinarily fall into the first trap set for them by quackery." The term "nerves" he applies to neurasthenia, hysteria, neurosis and psychoneurosis, and assumes that in all four groups the underlying morbid condition of the nervous system is identical, and the sufferer, so far as treatment is concerned, may apply to his case whichever of the above imposing terms he sees fit. It would be futile to find fault with the writer of a popular book on medicine for being unscientific and vague in statement. We may be thankful that in this instance there are so few inaccuracies and not more "roasts" of the medical profession.

NACHWEIS UND BESTIMMUNG VON GIFTEN AUF BIOLOGISCHEN WEGE. Von Dr. Hermann Fühner, Privatdozenten für Pharmakologie an der Universität Freiburg i. B. Paper. Price, $2.25 and postage. Pp. 176, with 89 illustrations. New York: Rebman Company, 1911.

This monograph presents a novelty for pharmacology and medical jurisprudence, and undoubtedly will be useful in making accessible scattered facts of great practical importance. During the last few years, especially through the investigations of experimental pharmacologists, we have learned of many instances in which the effect of certain substances on living organisms is entirely characteristic, e.g., the detection of epinephrin by its mydriatic effect on the frog's eye; the acetonitrile test of Reid Hunt for thyroid activity, etc. These, together with longer-known instances of characteristic biologic reactions, have been collected by Fühner, and detailed with sufficient information to permit their use for analytical, experimental or legal purposes. There are some serious omissions, such as the test for epinephrin by strips of uterus, and the cock's comb test for ergot, but these will probably be rectified in subsequent editions. Enough facts and information are collected to make the book extremely valuable for all persons doing work along the lines of medical jurisprudence, pharmacology or experimental medicine.

HAUTKRANKHEITEN SEXUELLEN URSPRUNGS BEI FRAUEN. Von Dr. Oskar Scheuer, Facharzt für Haut- und Geschlechtskrankheiten in Wien. Paper. Price, 9.50 marks. Pp. 204. Berlin: Urban & Schwarzenberg (New York: Rebman Company), 1911.

After a short summary of the historical phase of skin affections as they apply peculiarly to women, the author takes up the relation of the skin and other organs to the functions of the ovary. Here the changes occurring periodically are considered in detail, with, of course, especial reference to the graafian follicle, the corpus luteum and the so-called internal secretion, without, however, making alliance with any particular theory as to the production of this secretion. The blood-changes that take place as a result of this influence during both menstruation and pregnancy are considered in detail, with particular reference to the existence of a relation between such changes and localized skin lesions. In the following chapters Scheuer considers puberty, chlorosis, menstruation, diseases of the reproductive organs, castration, pregnancy, labor, the puerperium and the menopause.

The volume closes with a most complete bibliography, by no means the least valuable section of the work. Following, as it does, closely along the border line between gynecology and obstetrics on the one hand and dermatology on the other, this monograph has a definite place to fill in the literature of each speciality.

THE SURGERY OF ORAL DISEASES AND MALFORMATIONS. Their Diagnosis and Treatment. By George Van Ingen Brown, D.D.S., M.D., C.M., Oral Surgeon to St. Mary's Hospital, Milwaukee. Cloth. Price, $6. Pp. 740, with 359 Illustrations. Philadelphia: Lea & Febiger, 1912.

This book is written from the standpoint of a physician familiar with general diseases of the body and their relation to lesions of the mouth and vice versa. Books of this character have usually been prepared by specialists for specialists. The relation of local diseases to systemic conditions and vice versa have never been understood. The book is divided into thirteen chapters dealing with the following subjects: anesthesia—hemorrhage—shock; pathological dentition; infectious diseases; diseases of the mucous membrane of the mouth; diseases of the nervous system affecting the buccal region; diseases of bone; diseases of the glands; tumors; diseases of the maxillary sinus; diseases, tumors and malformations of the

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tongue; nasal deformities and diseases in relation to the maxillae; diseases, injuries and malformations of the lips; harelip, cleft palate, and defects of speech.

The author devotes considerable space to his own researches and to his own methods of operation on cleft palate and harelip. This book may be regarded as a reference as well as a text-book, and one of the best on the subject in the English language.

THE TRIUMPH OF AMERICAN MEDICINE IN THE CONSTRUCTION OF THE PANAMA CANAL. By J. Ewing Mears, M.D., LL.D. Cloth. Pp. 25. Philadelphia: William J. Dornan, 701 Arch Street, 1911.

This little monograph, well printed and illustrated, should be read by those interested in modern public health work, and in the problem of securing healthy surroundings for themselves and their families. It was written following a visit to the Canal Zone, and is a condensed but appreciative review of the work done by Colonel Gorgas and his department in Panama. Even those who are familiar with this epoch-making work must feel a glow of pride after reading the entire story. As the author well says in his closing paragraphs: "May we not congratulate our professional brethren who have so unselfishly devoted their talents and their lives to the service of their country on the great work they have accomplished? . . . So long as preventable destroying diseases flee before the conquering hosts of efficient sanitation, so long will the labors of these enviable benefactors of the human race be cherished."

MANUAL OF PHYSIOLOGY FOR STUDENTS AND PRACTITIONERS. By H. Willoughby Lyle, M.D., B.S., F.R.C.S., Assistant Ophthalmic Surgeon to King's College Hospital, London. Cloth. Price, $4. Pp. 747, with 135 illustrations. New York: Oxford University Press, 1911.

The author has succeeded in fulfilling his object in the publication of a work that will meet the demands of both the student and the practitioner. He presents the important facts of physiology in a simple, plain and concise manner, devoid of unnecessary details, rendering it especially valuable as a reference book for the busy practitioner. His long experience as a teacher has been of service, as shown in the arrangement of the material. The chapters on the heart and circulatory system and on the nervous system are especially good.

Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

American Journal of Medical Sciences, Philadelphia

May, CXLIII, No. 5, pp. 625-780

1 Pneumonia. J. T. Fotheringham, Toronto.
2 Anatomic Explanation of Relatively Less Resonant, Higher Pitched, Vesiculotympanitic Percussion Note Normally Found at Right Pulmonary Apex. G. Fetterolf and G. W. Norris, Philadelphia.
3 *Rupture of Kidney in Children. C. L. Gibson, New York.
4 *So-Called "Mixed" Tumors of Salivary Glands. L. B. Wilson and B. C. Willis, Rochester, Minn.
5 *Duodenal Alimentation. W. G. Morgan, Washington, D. C.
6 Typhoid Hemiplegia: Three Clinical Cases and One with Necropsy. E. M. Williams, Philadelphia.
7 *Blood of Patients with Pulmonary Tuberculosis Undergoing Sanitarium and Tuberculin Treatment. A. F. Miller, E. J. S. Lupton and L. Brown, Saranac Lake, N. Y.
8 Treatment of Acne with Stock and Autogenous Acne Bacillus Vaccine. E. D. Lovejoy, New York.
9 *Fatal Case of Tetany with Autopsy Findings Showing Hemorrhages in Parathyroid Glands. F. Proescher and T. Diller, Pittsburgh.
10 Rheumatic Myositis. V. C. Rowland, Cleveland, Ohio.
11 *Adams-Stokes Syndrome, with Complete Heart-Block and Practically Normal Bundle of His. W. Pepper and J. H. Austin, Philadelphia.
12 Reflex Vagus Phenomena Grouped in Symptom-Complexes. S. Neuhof, New York.

3. **Rupture of Kidney in Children.**—Four cases of complete traumatic rupture of the kidney in children, aged from 8 to 12 years, are reported by Gibson. A nephrectomy was done in each case and the patients recovered. One child fell a distance of 4½ feet landing on the ground on the right side. This case is interesting, showing a complete rupture resulting from a relatively slight trauma, leaving no mark on the body and producing absolutely no shock, the masking of kidney symptoms by the bruising of the lower abdominal muscles and the colon, the absence of any urinary symptoms until five days after the injury, and also that the kidney may be divided completely in two without appreciable solution of continuity of its capsule. The similarity of the lesions is interesting, being exactly alike in all four cases; complete division of the viscus in two parts, the lower one being the lesser. In one instance the capsule remained untorn. The fact that the kidney lesions were the same with the different kinds of violence seems to confirm the theory of "bursting" by hydraulic pressure. Also the line of rupture; vertical to the long axis at about the junction of the two lower thirds, would seem to indicate that there is here an instance of a definite line of least resistance such as Gibson has not seen indicated in any treatise on the subject. Although the lesion in all these cases was severe, the symptoms, on the whole, were mild, and in several ways deficient.

4. **Mixed Tumors of Salivary Glands.**—Fifty-six cases of mixed tumors of the salivary glands, which have been removed at operation at St. Mary's Hospital, are analyzed by Wilson and Willis. The sexes are almost equally divided, but with a slight preponderance of males. The age at onset in more than two-thirds of the cases is under forty years, while in one-half the cases it falls between twenty and forty years. These figures agree, on the whole, with those of other observers. The length of the period between the onset of the tumor and the time of surgical operation varies from one month to forty-four years, with a large preponderance of the cases running from one to ten years, and an average of six years and four months. The obvious lesson from this is that these tumors do not cause sufficient inconvenience to the patients to make them seek operation early. In only fourteen cases was there a history of pain. Of the twenty-one patients with tumors of the parotid who could give a definite history concerning mumps, fourteen (66 per cent.) were sure they had never had the disease. In other words, there seems to be no etiologic relationship established by the statistics of mumps and "mixed" tumors of the parotid. Of the fifty-six tumors, fifty were in the parotid and six in the submaxillary glands. Thirty were on the right side and twenty-six were on the left side. Grossly, the tumors may be divided into four groups: (1) Hard, fibrous masses with little cartilage and with little parenchyma; in this group were fifteen cases. (2) Very hard tumors containing large cartilage masses; in this group were seventeen cases. (3) Soft, more or less sarcoma-like tumors with a relatively small amount of fibrous connective tissue and a relatively large amount of parenchyma cells; in this group were four tumors. There is little evidence that these tumors arise from proliferating adult epithelium, or endothelium. On the other hand, there is considerable evidence to support the theory that these tumors are mesotheliomas of embryonic origin. After fairly complete operative removal few of the tumors recur.

5. **Duodenal Alimentation.**—Duodenal feeding, in Morgan's opinion, constitutes a mark of great progress in medicine, filling a long-felt want, a method of resting the stomach, and at the same time affording the economy abundant nourishment. In those cases in which it is indicated the results are most gratifying.

7. **Blood in Tuberculosis.**—The number of red blood-cells per cubic millimeter appears from a study of 273 cases to be slightly above normal. These cases when charted in the form of a frequency curve show for the incipient cases that the model for women is 4,500,000, for men slightly over 5,000,000. For the moderately advanced cases the mode for both men and women appears to be 5,000,000. The curves in both instances show a rather sharp rise and a slightly less rapid fall. The median and the mode differ slightly, the former being slightly higher than the latter. No relation to color index and color of mucous membranes was found to exist. Nothing was learned in a study of 130 incipient and 107 moderately advanced cases as to the relation to hemoglobin and color of mucous membranes. The hemoglobin was measured on admission by the Talquist scale and occasionally with the von Fleischl instrument in 272 patients. The results in

the incipient and moderately advanced stages for males and females as well as the totals in each group were charted. The mode in every case but one was 90 per cent., the moderately advanced male group having 95 per cent. as the mode.

Two hundred and seventy-five cases were studied as to the leukocytes. For incipients the mode is between 7,000 and 8,000, with a sharp rise from 4,000 and a more gradual decline. The males and females each exhibit a less marked mode at 8,000 to 9,000 and 7,000, respectively. For the moderately advanced cases the mode lies between 8,000 to 10,000, with a sharp rise from 5,000 and a gradual decline. The males and females each exhibit a fairly well-marked mode at 10,000 and 8,000, respectively. These figures all relate to counts made on admission, as the counts made on discharge are too few for any inductions to be drawn, but would seem to indicate that the curves are much flatter. There seemed to be no relation to duration of disease in 107 cases. Nothing was learned as to relation to weight from a study of 168 cases. There was apparently no relation to tubercle bacilli in sputum in 169 cases. In a study of sixty cases the percentage of the polymorphonuclears varied inversely with the percentage of the mononuclears, and was lowest in the incipient; higher in the moderately advanced, and highest in the far-advanced. The eosinophils followed the same rule as the mononuclears. It appears in this study that a reaction to tuberculin is almost always accompanied by a temperature. This followed in all the cases. During the period of reaction there is always an essential increase in the number of leukocytes when accompanied by a considerable increase in temperature; that the increase in leukocytes begins four to five hours after injection, and is closely followed by the rise in temperature. There was no evidence of a leukopenia observed in any of these cases. The rise of leukocytes is generally followed by a decrease in the number of leukocytes during the day after the first dose which causes an increase. In case of a repetition of the same dose or a slight increase of the dose the increase of the number of leukocytes corresponding to a considerable increase in the temperature appeared to be smaller and extended over a longer time. The counts taken at 1 a. m., four to five hours after injection, showed neither a leukocytosis nor a leukopenia. There were twenty-seven cases studied.

9. **Hemorrhages in Parathyroids.**—The changes in three parathyroid glands were almost uniform in this case. With low power, extensive infiltration of the parenchyma with large fat cells was noted, causing partial atrophy. The connective-tissue stroma was greatly thickened and divided the parenchyma into various sized lobules. Blood-vessels and capillaries were greatly distended. With higher power the parenchyma consisted largely of small, indistinctly outlined epithelial cells which were rich in chromatin (Cell Type II). The protoplasm stained bluish red. On the edge of the gland were found large, compact, distinctly outlined polygonal epithelial or oxyophile cells (Cell Type I). The protoplasm of these cells was finely granular, somewhat cloudy, and stained fairly well with eosin. The small intercellular mass stained more deeply with eosin. The nuclei of the cells were not so rich in chromatin as in Cell Type II, and as in some near the periphery. Some cells were without nuclei. Small groups of the same cells were found inside of Cell Type II. The fine granulated appearance and the bluish-red color of Cell Types I and II suggested a slight parenchymatous degeneration. In normal epithelial cells the protoplasm stains deep red with eosin, or is nearly colorless.

The most interesting morbid change in the glands was the multiple hemorrhages which were diffused throughout one-half to two-thirds of the parenchyma in the form of small circumscribed areas. These hemorrhages could be traced to medium-sized blood-vessels. Larger perivascular hemorrhages, as found in the parathyroid glands of children, were not noted. The appearance of the hemorrhages was as follows: The red blood cells lay directly on the epithelial cells, which could be demonstrated with the Van Gieson stain. In contrast with the distended blood-vessels and capillaries fine, spindle-shaped endothelial cells were seen, deeply stained and at regular distances apart, which differentiated them from a hemorrhage. The fibrous adventitia of the vessels showed slight hyaline degeneration. Some vessels had very small lumina. The walls of the veins were much distended. In some places drops of colloid inside of glandular-like formations of epithelial cells were seen. Retrogressive changes of the hemorrhages, such as pigment, were not found, and this led to the conclusion that the hemorrhages must have been of recent origin. The red blood cells presented a peculiar appearance. Some of them appeared deeply stained with eosin and were distinctly outlined. Others were merely visible and were stained very lightly, giving the impression that the hemoglobin had been extracted from them.

11. **Adams-Stokes Syndrome With Heart-Block.**—The special points of interest in this case that Pepper and Austin bring out in this paper are: A progressing typical case of heart-block lasting for three or four years, at first partial block alternating with normal rhythm, with occasional attacks of complete block, and later persistent complete block, and yet at the autopsy apparently no sufficient lesion was discovered in the bundle of His to explain the block; the giving of a dose of salvarsan to the patient while he had complete heart-block and was having attacks daily of Stokes-Adams syndrome without any noticeable good or bad result; the extreme length of several of the syncopal attacks. One attack lasted eight minutes, during the last four minutes of which the auricles apparently stopped beating in addition to the cessation of the ventricles. Apparently the man was dead, but artificial respiration brought him to life. Another attack was nearly as long, and very dramatic. This lasted six minutes, and for fully three minutes the auricles had apparently stopped beating, as no sounds could be heard over the chest, no pulsation noted in the neck, no respiratory movements occurred and the patient's color, which at first had been white, became dusky. Artificial respiration again restored the man to life and consciousness, which was promptly followed by a violent hysterical outburst, in which the man sang, cried and shouted. That these periods of apparent cessation of auricular action may have been due to auricular fibrillation the authors believe cannot be denied.

In the first report of this case, already referred to, attention was particularly called to what was believed to be a genuine instance, though an isolated single one, of hemisystole. Apparently, as shown by the tracing on a single occasion, the left ventricle did contract normally after the auricular contraction; but the right ventricle did not contract, or possibly contracted very feebly, and the following statement was made in that article. The serial sections showed at the bifurcation of the bundle the branch passing to the right ventricle slightly encroached on by an area of fat and fibrous tissue, while the branch to the left ventricle was normal. Although during the man's first stay in the hospital he showed for several days constant irregular ventricular action during complete block without syncopal attacks, he never showed this irregularity later, even though he had syncopal attacks and complete block.

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Wisconsin Medical Journal, Milwaukee

May, X, No. 12, pp. 685-750

13 Few Suggestions to Examining Physicians in Commitment of Insane. W. F. Lorenz, Mendota.
14 Treatment of Puerperal Infection. T. J. Watkins, Chicago.
15 Placenta Prævia. G. A. Carhart, Milwaukee.
16 Surgical Management of Developmental Defects in New-Born. H. Greenberg, Milwaukee.
17 Value of Bacterins in Pneumonia. W. E. Robertson and G. M. Illman, Philadelphia.

American Journal of Obstetrics and Diseases of Women and Children, York, Pa.

May, LXV, No. 413, pp. 753-936

18 *Study of 139 Cases of Induction of Labor with Modified Champetier De Ribes Bag. G. L. Brodhead, New York.
19 *Vaginal Hysterotomy in Late Months of Pregnancy. R. W. Lobenstine, New York.
20 Vaginal Cesarean Section and Its Limitations, Particularly in Eclampsia. G. W. Kosmak, New York.
21 Is Toxic Vomiting of Pregnancy a Clinical Entity? F. R. Williams, Bisbee, Ariz.
22 Integrity of Uterine Scar After Cesarean Section. J. A. Harrar, New York.
23 Louise Bourgeois. W. H. Allport, Chicago.
24 Management of Appendicitis in Childhood. W. F. Campbell, Brooklyn.
25 Minor Points in Infant Feeding. R. A. Benson, New York.
26 Empyema of Infancy. S. A. Blummer, New York.
27 Use of Flexner Serum in Cerebrospinal Meningitis. E. G. Hynes, New York.

18. **Induction of Labor**.—For the induction of labor with a Champetier de Ribes bag, sizes two and three, have been found most useful by Brodhead. Accidental rupture of the membranes occurs in only 3 per cent. of all cases. The great value of the bag is shown by the fact that in 90 per cent. of all cases, labor was induced by the use of not more than two bags, while in nearly 70 per cent. one bag was sufficient. In only 6 per cent. of all cases was labor not induced by the bags. Anesthesia for bag introduction is usually unnecessary, as shown by the fact that in only 14 per cent. of private cases was an anesthetic used, or in 16.6 per cent. of all cases including many hospital cases in which the anesthetic was deemed advisable for clinical purposes. In 37 per cent. of all cases, labor begins at the time of the introduction of the first bag, in 70 per cent. of all cases labor commences within twelve hours after the insertion of the first bag, while in 88 per cent. of all cases, labor begins within thirty hours after the insertion of the first bag. The average length of time intervening between the insertion of the bag and the onset of labor is in primipara eight hours and twenty-two minutes, in multipara ten hours and twenty-two minutes, and in all cases, nine hours and forty-one minutes.

In all primiparas, the average duration of labor induced by the bag, was twenty-two hours, nine minutes. In all multiparas, the average was fifteen hours fifty-two minutes and the average in all cases was eighteen hours two minutes. Forty-nine per cent. of labors induced by the bag terminated normally and 70 per cent. terminated normally or with the low-forceps operation. In 5 per cent. of all cases, the presentation was changed, but in only one case was the outcome affected because of the accident. In 139 cases, the cord presented or prolapsed in six, or 4.3 per cent., but it must be remembered that in sixty-three cases, labor was induced for contracted pelvis, relative disproportion of hydramnion, and that therefore the accident under any circumstances was much more likely to occur. The morbidity in private work is practically *nil*, and in hospital work very slight. The fetal mortality in private work was about 5 per cent., in hospital work 11 per cent. This can be explained partly by the fact that private patients receive naturally more individual attention, and the results necessarily are correspondingly better. The maternal mortality from the use of the bag is *nil*.

19. **Vaginal Hysterotomy**.—Vaginal hysterotomy is regarded by Lobenstine as an operation that will in competent hands and under proper conditions tend to markedly lessen both maternal and infant mortality in a number of the more serious complications of pregnancy. The prerequisites of success are: Skill in vaginal surgery, proper surroundings, abundance of good light and at least two competent assistants.

Northwest Medicine, Seattle, Wash.

May, IV, No. 5, pp. 133-164

28 Rhizotomy for Spastic Paralysis (Radiocotomy.) E. Viko, Salt Lake City, Utah.
29 Trifacial Neuralgia. A. A. Robinson, Ogden, Utah.
30 Pyuria and Determination of Its Origin. H. Klussman, Spokane.
31 Use of Cystoscope in Diagnosis. O. S. Fowler, Denver.
32 Blood of Infancy and Early Childhood. J. B. Manning, Seattle.
33 Local Anesthesia in Operative Treatment of Anorectal Diseases. E. H. Brown, Portland, Ore.
34 Prevention of Typhoid by Vaccines. E. P. Fick, Seattle.
35 Tonsillotomy or Tonsillectomy, Which? F. Stauffer, Salt Lake City, Utah.

New Orleans Medical and Surgical Journal

May, LXIV, No. 11, pp. 811-880

36 Outline of Care of Obstetric Patient in the Allgemeines Krankenhaus Frauenklinik, Vienna, 2d Division. M. A. Shlenker, New Orleans.
37 Brain Tumors. E. M. Hummel, New Orleans.
38 Enemata and Murphy Drip. E. D. Martin, New Orelans.
39 Treatment of Old Intra-Capsular Fracture of Hip-Joint by Nailing. E. S. Hatch, New Orleans.
40 *Treatment of Tetanus. J. D. Martin, New Orleans.
41 Is Acute Anterio-Poliomyelitis, or Infantile Paralysis, Infectious or Strictly a Sporadic Disease? C. E. Edgerton, Coushatta, La.
42 Non-Specific Congestive Endometritis. E. R. Harrington, Natchitoches, La.
43 Open Treatment of Fractures of Shafts of Long Bones. A. C. McLamore, Gahagan, La.

40. **Treatment of Tetanus**.—Martin summarizes his treatment as follows: The wound should be as thoroughly asepticized as possible, freely opened, and any foreign body removed, then swabbed out with pure carbolic acid, followed by alcohol. Fifteen hundred units of antitetanic serum should be given each day for at least five or six days, and chloretome in 30-grain doses should be given by rectum. When the respirations go above 30 it means the diaphragm muscle is having a hard time, and if not relieved it is only a question of how long it will be able to last. Morphin should be given only when there is pain. Liquid nourishment is to be given. A most important part of the treatment is to keep the bowels open.

Journal-Lancet, Minneapolis

May 15, XXXII, No. 10, pp. 253-280

44 Abscess of Liver Associated with or Following Suppurative Appendicitis. S. M. Hohf, Yankton, S. Dak.
45 Multiple Myeloma. T. W. Stumm, St. Paul.
46 New Public Health. H. W. Hill, Minneapolis.

Military Surgeon, Washington, D. C.

May, XXX, No. 5, pp. 485-617

47 Closing Remarks to Graduating Class of Naval Medical School on March 25, 1912. H. G. Beyer, U. S. Navy.
48 Military Absenteeism in Man; Relation of Medical Department Thereto. E. L. Munson, Fort Leavenworth, Kan.
49 Russian Army Medical Service in Manchuria; Critical Review of Some of Its Phases. G. M. Blech.
50 Salvarsan; Description of Apparatus for Intravenous Administration. R. U. Patterson, U. S. Army.
51 Recruiting in Navy. C. H. T. Lowndes, U. S. Navy.
52 Contagious Diseases on Board Ship. E. G. Parker, U. S. Navy.
53 *Some Tests as to Efficacy of Chlorinated Lime in Purifying Drinking-Water. A. T. Cooper, U. S. Army.
54 Value of Medical Statistics. S. W. French, U. S. Army.
55 Advantages of Accepted Plan for Latrine Boxes. W. Lyster, U. S. Army.
56 Entero Vesical Fistula of Amebic Origin. C. G. Levison, U. S. Army.
57 Calomel in Gonorrheal Prophylaxis. R. B. Henry, U. S. Navy.

53. **Purifying Drinking Water**.—Cooper's experiments tend to show that chlorinated lime will markedly reduce the bacterial count in water and in strong enough dilutions render it safe for drinking purposes. In case of an emergency it may be used as a quick, cheap, and fairly efficient way, where no other means are at hand, to render suspicious water safe. As a general rule if one gram of chlorinated lime, containing approximately 30 per cent. of available chlorin, is thoroughly mixed in a liter of water and enough of this mixture, to make one part of chlorinated lime to 200,000 parts of water, is added to clear water which is intended to be used for drinking purposes, and this water allowed to stand for at least 20 minutes after having been thoroughly shaken, Cooper says that the water so treated may be used with impunity for drinking purposes.

Colorado Medicine, Denver

May, IX, No. 5, pp. 129-160

58 Management of Infantile Eczema. A. J. Markley, Denver.
59 Appendicitis as Complication of Pregnancy and Puerperium. H. McClannahan, Colorado Springs.
60 Benign Cyst of Long Bones. H. W. Wilcox, Denver.
61 Indications for Operation of Inguinal Hernia. E. W. Knowles, Greeley.
62 Etiology of Puerperal Eclampsia. S. McKibben, Creede.
63 Some Aspects of Acute Lobar Pneumonia. W. Senger, Pueblo.
64 Steamboat Springs as a Spa. H. C. Dodge, Steamboat Springs.

American Journal of Surgery, New York

May, XXVI, No. 5, pp. 161-192

65 Myoma Heart. C. C. Barrows, New York.
66 Cholecystostomy Versus Cholecystectomy. L. Frank, Louisville, Ky.
67 Diagnosis of Appendicitis. F. C. Paffard, Brooklyn.
68 Treatment of Posterior Uterine Displacements. H. A. Wade, Brooklyn.
69 Surgical Essentials. F. E. Neef, New York.
70 Treatment of Infertilitas Masculinus. Q. W. Hunter, Louisville, Ky.
71 *Scalpel Savers. D. H. Stewart, New York.

71. **Scalpel Savers**.—The knives used by Stewart for the skin incision are simply pieces of strip steel 9 inches long, a little more than ½-inch wide (anywhere between a half and three-quarters), and 1/16-inch thick. The edges are cut on it as one would like a knife to be shaped. He says that to use a scalpel for a skin incision or on a bone is almost like driving tacks with a watch for a hammer. The scalpel has its proper field in cutting subdermic and soft tissues, and to that field its use must be limited if its edge and usefulness are to be preserved.

Albany Medical Annals, New York

May, XXXIII, No. 5, pp. 253-314

72 *Services of Sciences to Rational Medicine. H. W. Wiley, Washington, D. C.
73 Anatomy of Human Heart. N. K. Fromm, Albany, N. Y.
74 Pathology of Heart. H. S. Bernstein, Albany, N. Y.
75 Treatment of Diseases of Heart. S. B. Ward, Albany, N. Y.
76 Surgery of Heart. C. G. Hacker, Albany, N. Y.

72. Abstracted in THE JOURNAL, May 11, 1912, p. 1474.

Chicago Medical Recorder

May 15, XXXIV, No. 5, pp. 293-306

77 *Cat and Transmission of Disease. C. A. Osborne, Worcester, Mass.
78 Occupational Disease. G. W. Webster, Chicago.

77. **Cat and Transmission of Disease.**—Osborne reviews the part the cat plays, or is in a position to play, in the transmission of disease. When the wide-spread distribution of both plant and animal parasites in all species of animals is considered, and the still more significant fact, that animal experimentation already has revealed the identity of many pathogenic microorganisms in different animal species, the problem of the cat as a carrier of disease becomes alive with undesirable possibilities. The economic aspect of the question to the farmer is in need of immediate investigation. The cat is peculiarly adapted to distribute specific disease organisms as she ranges over the farm. In the city, as the cat makes her home in places where food is for sale, there is unlimited opportunity for infection of food, while meat, butter and milk furnish culture media for many bacterial organisms injurious to man. The scavenging habits of the cat, in connection with her great freedom in the house, give her unlimited opportunity for acquiring and spreading infection from person to person. Osborne would make bacteriologic studies of the bacterial flora of the mouth and throat of the cat, because she has such unlimited opportunity to take in all species of infectious organisms. For the safety of the child and the general public a cat should be kept under as complete control as any other domestic animal. A cat which has become infected, or one which is suspected of being infected with any transmissible disease, should be quarantined so as to insure against the spread of the disease. All tramp cats ought to be kept from contact with children until it is certain that they harbor no infection. Boards of health of towns and cities can no longer ignore the cat as an active agent in carrying many kinds of disease infection. They should therefore take such measures as will eliminate all cats from public streets, alleys and all places under public jurisdiction.

California State Journal of Medicine, San Francisco

May, X, No. 5, pp. 177-220

79 Treatment of Severe Cases of Diabetes. E. Schmoll, San Francisco.
80 Cases of Sinus Thrombosis and Retropharyngeal Abscess. D. H. Trowbridge, Fresno.
81 *Blood-Pressure in Pneumonia. F. F. Gundrum and E. E. Johnson, Sacramento.
82 Special Factors Concerning Surgery of Cancer of Lip and Tongue. H. A. L. Ryfkogel, San Francisco.
83 Salvarsan in Cutaneous Syphilis. H. Morrow, San Francisco.
84 Intravenous Injection of Salvarsan, with Special Reference to Its Technic. G. W. Hartman, San Francisco.
85 Alcoholic Injection of Superior Laryngeal Nerve. H. S. Moore, San Francisco.
86 Choice of Technic in Hysterectomy. J. H. Barbat, San Francisco.
87 *Treatment of Urethritis in Male. H. C. Loos and A. E. Banks, San Diego.
88 Treatment of Scoliosis. J. T. Watkins, San Francisco.

81. **Blood-Pressure in Pneumonia.**—During the months of December and January past, the authors studied a series of thirty consecutive patients admitted to the hospital with pneumonia. All blood-pressure readings were made with an ordinary mercury manometer of the Riva-Rocci type or with a spring manometer which was frequently compared to the mercury column. The blood-pressure and the pulse, taken simultaneously, were recorded daily or oftener if any marked change in the patient's clinical condition was noted. Of the thirty cases twenty-six were lobar in type, four bronchopneumonic. The patients were all adult males from eighteen to sixty years of age. Twenty were alcoholics; ten denied alcoholic history. The termination in ten cases was by crisis; in eleven by lysis, and in nine by death. The mortality (30 per cent.) is high but not remarkable for a public institution where all of the patients are of the "less fortunate." They found very great variations in blood-pressure on admission (65 to 122) and of pulse as well (68 to 148). The B P (Gibson) quotient on admission was one or more than one in eighteen cases and less than one in twelve. Of the eighteen cases showing a quotient of one or more, than one on admission, seventeen (94 per cent.) recovered and one (6 per cent.) died. Of the twelve patients whose quotient was less than one, three (25 per cent.) recovered and nine (75 per cent.) died. The findings on the day after admission were much more suggestive. Twenty-one patients showed a quotient of one or higher and nine lower than one, which figures correspond exactly with the death-rate. The correspondence is not so exact, however, as these figures would indicate, for of the twenty-one who had one or plus one fraction on the second day, twenty (96 per cent.) recovered and one (4 per cent.) died. Several patients whose quotients began to drop down were apparently greatly helped by increase or change in medication. The authors used moderate doses of strychnin by mouth as long as the quotient could be maintained at one or more. If more stimulation was required they added caffein in 4-grain doses especially if the heart muscle seemed to be inefficient. The majority of the favorable cases received no other drug. The unfavorable cases were given, in addition, adrenalin hypodermatically when the low pressure was apparently due to peripheral dilation and digitalin and camphor when cardiac weakness developed. Gundrum and Johnson have placed most reliance on the strychnin and caffein with occasional doses of adrenalin for times of special danger, possibly because they used this combination first and on favorable cases.

87. **Treatment of Urethritis.**—For the dysuria and frequent desire and other deep urethral symptoms the authors have found nothing so serviceable as a formula something like the following, varying of course with the individual case:

R	Gm. or c.c.		
Chloralis hydratis	52		gr. viii
Potassii bicarbonatis	66		gr. x
Potassii bromidi	33	or	gr. v
Extract hyoscyami	66		m. x
Glycerini			
Aqua, q.s.			

M. One such dose every four hours.

As soon as relief is obtained they follow with 7½ gr. doses of hexamethylene tetramine every four or five hours for a day or two, which seems to have an inhibiting action on the process. The patient is ordered to bed if feasible, and a suspensory bandage is fitted at once. A purge of calomel followed by a hot rectal enema is beneficial. The diet is light and bland and now if never before the patient is taught how to acquire the cold water habit, large draughts of water being ordered just as often as the patient will take them. Nothing is done in the way of local treatment till relief from severe dysuria is obtained, then after irrigating the anterior urethra with boric acid solution, hot, a No. 12 F. soft rubber catheter is passed just beyond the shut-off muscle and the posterior urethra and bladder and thoroughly rinsed with the same solution running from the Valentine irrigator through the catheter, following which a weak solution of protargol (2 per cent. or 3 per cent.) is instilled into the deep urethra with a Guyon syringe and the catheter then slowly withdrawn, allowing a stream of the solution to fill the anterior urethra. This latter is held in by a clamp or the fingers for about three minutes. This treatment is repeated once or twice daily according to the manner in which the patient tolerates it, gradually increasing the strength of the solution till a 5 per cent. to 10 per cent. solution is being used.

Lancet-Clinic, Cincinnati

May 18, CVII, No. 20, pp. 531-558

89 Obstructive Prostatitis. G. F. McKim, Cincinnati.
90 Etiology of Visceroptosis, with Special Reference to Pregnancy Factor. C. Culbertson, Chicago.
91 Principles Underlying Treatment of Visceroptosis. W. Mac I. Thompson, Chicago.
92 *Diagnostic Aids in Surgery of Renal Pelvis and Ureter, with Special Reference to Pyelography. W. F. Braasch, Rochester, Minn.
93 Studying Manner of Housing and Treating Tubercular Patients in Europe, Summer of 1911. C. R. Holmes, Cincinnati.

92. Abstracted in THE JOURNAL Nov. 4, 1911, p. 1556.

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New York State Journal of Medicine, New York

May, XII, No. 5, pp. 209-276

94 *Animal Experimentation and Its Benefits to Mankind. W. B. Cannon, Boston.
95 *Services of Sciences to Rational Medicine. H. W. Wiley, Washington, D. C.
96 *Duty of Family Physician in Management of Surgical Cases. J. M. T. Finney, Baltimore.
97 Anaphylaxis in Its Relations to Clinical Medicine. B. White, Brooklyn.
98 Present Status of Vaccine (Bacterins) Therapeutics in Purulent Diseases of Ear. R. H. Huvelle, New York.
99 Vaccine Therapy in Medicine. T. W. Clarke, Utica.

94 and 96. Abstracted in THE JOURNAL May 11, 1912, p. 1475.

95. Abstracted in THE JOURNAL May 11, 1912, p. 1474 and also published in the *Albany Medical Annals* for May.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London

May 11, I., No. 2680, pp. 1053-1108

1 Sanity and Insanity. F. W. Mott.
2 Coma and Its Differential Diagnosis. D. Forsyth.
3 *Galvanization of Brain. R. T. Caesar.
4 *Typhoid Complicated with Cholecystitis. W. A. Evelyn.
5 Green Urine Due to Proprietary Pill. F. L. Golla and H. D. Rolleston.
6 Mechanism and Treatment of Shock. H. T. Gray and L. Parsons.

3. **Galvanization of Brain.**—The rapidity with which the effusion, due to a recent injury, disappears under the application of a properly applied current, Caesar says, is very striking. He has reduced a 2¼ inch swelling of the ankle-joint in thirty-five minutes, and that is quite an ordinary and usual experience, and the reduction is accompanied by entire loss of pain. If, then, this can be done to the ankle-joint, why not make use of the same treatment in the case of the brain? It is, of course, not advisable to use the galvanic current too soon, time must be given for recovery from shock. This would probably begin at a month or six weeks from the onset. In cases of embolism it would do no harm to commence much earlier. Each case should be judged on its own merits. A case is cited.

A man was at the bottom of a mine shaft when a stone or "key" fell on his head, rendering him unconscious. The skull on the left side above and in front of the ear was fractured. He was for three months unconscious. He then made a gradual return to consciousness and a tedious return to partial recovery. His right arm was useless. Speech was normal, but he very easily lost all power to talk, any slight excitement or sudden noise rendering him incoherent. He suffered from convulsions which were very easily induced. Several pieces of bone were removed, but he was not much better. Two years after the accident, he had great difficulty in speaking, and it was often impossible to understand what he said. He was in a very nervous state, was quite unable to go about by himself, could not dress himself, as he could not use his right arm. He was unable to express his thoughts in words. His eyesight was "blurred and foggy," and he "saw double." He suffered from convulsions, very slight causes being sufficient to excite them. He was quite unable to raise his arm from his side, though he could pronate it slightly; his hand was numb; he could grasp an object in his hand, but could not let go again. The electrical reactions of the various muscles were curiously varied, but there was no reaction of degeneration.

Caesar commenced treatment July, 1911. On this occasion the current was passed through the brain and right arm, the latter being immersed in a porcelain arm bath. The amount of current was only 2 milliamperes, this being sufficient. He afterwards increased the current considerably, being guided entirely by symptoms. On two occasions he passed as much as 30 milliamperes. The application of the current was always followed by an increased sense of well-being; it acted as a tonic to him; it made him somewhat drowsy and he slept well from the commencement of his treatment. The current was passed on each occasion for fifteen minutes. This was followed by stimulation of the affected muscles by means of the interrupted continuous current, 100 interruptions to the second.

No medicine was given. This combined treatment was carried out twice weekly for six weeks. He can now talk quite easily and plainly, having only a slight stammer, and can convert his thoughts into words without any trouble whatever. The convulsions have stopped. His eyesight is normal. He can use his right arm quite well, can dress and feed himself without any trouble, but cannot extend his thumb. The arm is much wasted, but is considerably increased in size under the treatment, and will continue to improve with use. He goes about by himself, transacts his business, and has so entirely and successfully recovered that he has obtained another post similar to the one he occupied before his accident.

4. **Typhoid Complicated With Cholecystitis.**—The points of interest in Evelyn's case are: 1. The total absence of any pain whatsoever at any time during the life of the patient pointing to the presence of gall-stones until the sudden and violent attack. 2. The absolute constipation throughout the illness, a condition more often met with nowadays in enteric fever than not. 3. The presence of the *Bacillus typhosus* in the pure cultures made from the lining of the gall-bladder.

Lancet, London

May 11, I., No. 19, pp. 1253-1318

7 *Treatment of Acute Appendicitis; When and How to Operate. Sir G. T. Beatson.
8 Hedonal as a General Anesthetic Administered by Intravenous Infusion. C. M. Page.
9 Vicious Circles Associated with Disorders of Nose, Throat and Ear. J. B. Hurry.
10 Vital Phenomena Occurring Under Anesthesia, Nervous, Circulatory, Respiratory and Metabolic, and Their Relation to Safety of Patient. D. W. Buxton.
11 Report on Inquiry into Prevalence of Syphilis in South African Native and Its Influence in Aiding Spread of Tuberculosis. B. G. Brock.
12 Esophagotomy for Impacted Tooth-Plate. R. F. Jowers.
13 Multilocular or Alveolar Hydatid in Left Broad Ligament Complicated by Pregnancy. J. Oliver.
14 Heating of School-Rooms by Closed Slow Combustion Stoves Burning Coke. H. W. Sinclair and V. H. Kirkham.

7. **Treatment of Acute Appendicitis.**—It is held by Beatson that what we must aim at in our treatment of acute appendicitis is to bring the conditions at operation as near as possible to those that mark the "interval stage," when we know we can operate with comparative safety.

Dublin Journal of Medical Science

May, III, No. 485, pp. 321-400

15 *Fatal Result Following Injection of Salvarsan. H. Moore.
16 Volvulus of Spermatic Cord. A. A. McConnell.
17 National Insurance Act and State Medicine. R. J. Rowlette.
18 Non-Notifiable Infectious Diseases as Cause of Mortality in Childhood, with Suggestions for Their Control. Sir J. Moore.
19 *Clinical Estimation of Blood-Pressure. G. E. Nesbitt.

15. **Fatal Results Following Injection of Salvarsan.**—Following intravenous injection of 0.5 gr. of salvarsan in a case of early general paralysis of insane, death occurred about thirty hours afterward. Ehrlich maintained that severe and advanced disease of the central nervous and circulatory system is a contra-indication to this treatment.

19. **Estimation of Blood-Pressure.**—The fallacies which have suggested themselves to Nesbitt as being likely to arise and to vitiate our conclusions in clinical work are discussed by him under four heads: 1. Instrumental. 2. The personal factor. 3. Disturbing factors in the subject. 4. Error of deduction (data being assumed correct).

British Journal of Children's Diseases, London

May, IX, No. 101, pp. 193-240

20 *Two Cases of Amaurotic Family Idiocy or Tay-Sach's Disease. J. Turner.
21 *Paternal Transmission of Syphilis. C. F. Marshall.
22 Diabetes Insipidus in Boy with Positive Wassermann Reaction. F. P. Weber.
23 A New Galactagogue. W. Lauzun-Brown.

20. **Amaurotic Family Idiocy.**—One of Turner's cases is by him believed to be the first yet published out of upward of a hundred reported, which occurred in a child not of Jewish extraction. The boy's father, who has a small farm in Essex,

claimed that neither he, the father, nor his wife are Jewish, nor, so far as he knows, are there any Jewish ancestors on either side. The father is an Essex man. The patient (aged 5) was undeveloped, weighed only 39½ pounds, unable to stand or talk; he had a large umbilical hernia and no thumbs; a very small wart on the left hand seemed to be the only representative of a thumb. His knee-jerks were exaggerated, his plantar reflexes of the flexor type. Palate wide, teeth small and peg-like. His tongue lolled out of his mouth and he slobbered. He could swallow fairly well. He made a clicking noise with his tongue, but could not articulate. He was helpless, but gave no more trouble than would an infant. Stated not to be an epileptic. Beyond the statement that he was quite unobservant, there was no mention made of his sight. In the condition he was in it was difficult to test.

On January 7 there was a note that during the past week he had twitchings of face and eyes. He was then on his back, with flaccid limbs and absence of conjunctival reflexes. There was no plantar response and no reaction to pricking in legs or arms, but when pricked on the cheek he draws up the muscles of the stimulated side, and the same with the brow. He breathes regularly and slowly, occasionally whimpers, and draws up his arms and holds them suspended for a short time. Slight vertical nystagmus. Can swallow. Temperature normal. Feet cold. January 8, 1906, he died. The gross anatomic and histologic findings were typic of amaurotic idiocy.

21. **Paternal Transmission of Syphilis.**—It is Marshall's belief that there is not sufficient evidence to justify the renunciation of the doctrine of the paternal transmission of syphilis.

Journal of Tropical Medicine and Hygiene, London

May 1, XV, No. 9, pp. 129-144

24 Blood in Sprue. G. C. Low.
25 "Winter Cases" of Pellagra. C. Wellman and D. H. Sparks.

Annales de Gynécologie et d'Obstétrique, Paris

April, XXXIX, No. 4, pp. 193-256

26 *Rupture of Vagina During Labor. (Des ruptures de la voute du vagin pendant le travail.) J. Rouvier.
27 Intraperitoneal Hemorrhage from Rupture of Graafian Follicle. (Inondation péritonéale par rupture d'un follicule de de Graaf.) D. J. Cranwell.
28 *Influence of Pregnancy on Epilepsy. (Epilepsie et grossesse. Avortement provoqué.) M. Audebert.

26. **Rupture of Vagina During Delivery.**—Rouvier comments on the seriousness of complete rupture of the roof of the vagina as shown by review of the literature, and then reports four cases from his own experience. Three of his patients died and in the fourth the uterus was bound down by cicatricial tissue following rupture of the cul-de-sac of the vagina five years before. He now makes a point of examining the roof of the vagina after delivery in every difficult case, and in this way has discovered tears which otherwise might have escaped detection. In one of the fatal cases the obstetrician had been formally accused of malpractice, but the discovery of the rupture of the vagina threw a new light on the case.

28. **Influence of Pregnancy on Epilepsy.**—Audebert noted aggravation of the epilepsy in one case during the pregnancy. After the delivery of a child at term, which had succumbed during labor, the epilepsy relapsed into its previously comparatively mild form. In a case reported each by Charpentier and Vallois the aggravation proved fatal, the seizures becoming almost continuous by the second or third month and the patients dying in coma or acute mania. Audebert reports further the details of another case in which the epilepsy became much aggravated during the pregnancy and spontaneous abortion occurred at the second month. When the woman, 21 years old, became pregnant again the epilepsy became aggravated anew. The patient was under observation in the hospital and the intense headache and progressively increasing frequency and severity of the attacks and the knowledge that the child at best would have a serious inheritance of alcoholism from its grandparents and epilepsy from its mother—these reasons turned the scale in favor of termination of the pregnancy, after which the epilepsy and other symptoms became much attenuated.

Annales de l'Institut Pasteur, Paris

April, XXVI, No. 4, pp. 241-320

29 Favorable Action of Manganese on Growth of Aspergillus Niger. G. Bertrand and M. Javillier.
30 Experimental Research on Typhus. III. C. Nicolle, E. Conseil and A. Conor. To be continued.
31 *Secondary Pyemia in Contagious Disease in Sheep and Goats. (Le "mal de Lure." Pyohémie secondaire à l'agalaxie contagieuse de la brebis et de la chèvre.) H. Carré.
32 Secondary Infections in Tuberculous Suppuration in the Lungs. (Des infections secondaires dans la tuberculose ulcéreuse du poumon.) A. Veillon and G. Repaci.
33 No Sero-Agglutination with Pneumococci. (Études sur le pneumocoque. IV.—Agglutination des pneumocoques humains et animaux.) L. Cotini and C. Truche.
34 Neutralization of Tetanus Toxin by Brain Substance. (A propos de la neutralisation de la toxine tétanique par la substance cérébrale.) A. Marie and M. Tiffeneau.

31. **Secondary Pyemic Disease in Contagious Episootic.**—Carré has found a specific "pyobacillus" in a pyemic affection which develops secondary to a contagious disease in sheep and goats, prevalent last year in certain districts in the southeastern parts of France, especially in the Lure mountains. The disease causes suppuration and sloughing in joints, eyes and teats in animals affected with contagious agalactia, not in others, and it has a pronounced aggravating action on the primary disease.

Lyon Chirurgical, Lyons

May, VII, No. 5, pp. 485-608

35 *Coxa Vara and Consecutive Spontaneous Fracture. (Coxa flecta des adolescents et fracture spontanée juxta-épiphysaire du col du fémur.) M. Gangolphe.
36 *Bilateral Tuberculosis of the Kidney and Nephrectomy. V. Rochet and L. Thevenot.
37 Torsion of the Transverse Colon. E. Duroux.
38 *Roentgenotherapy of Hypertrophy of the Thymus. (Le traitement roentgénien de l'hypertrophie du thymus. Ses indications comparées à celles de la thymectomie.) C. Regaud and R. Crémieu.

35. **Coxa Vara.**—Gangolphe has become convinced by roentgenoscopic control of two cases, boys about 14, that the so-called essential or idiopathic coxa vara is in reality merely a disturbance in the growth of the bone from disproportion in its development, especially the hyperactivity of the region next to the epiphysis. The result of this is a softening of the bone at this point; the neck softens and bends like a wax candle on a hot day. The epiphysis may become separated or actual fracture may result, but the fracture or separation of the epiphysis is not the cause of the trouble but only a feature of its later stages. In one case described, the affection occurred in one hip while the other hip was sound, and the patient was cured by immobilization and weight extension. A few months later the same symptoms began to develop in the previously sound hip but prompt immobilization in time prevented the bending of the neck and the patient soon outgrew the tendency. The affection develops insidiously until suddenly or after some slight trauma the patient is suddenly unable to use his thigh and there is violent local pain, but no depression in the lumbar region characteristic of ordinary hip-joint disease, while there is absolute inability to use the limb. Roentgenoscopy explains the trouble at once, showing the curving of the neck of the femur for which no explanation can be found except the disproportionate growth of the various parts of the bones in the region. The sound limb should be supervised to detect the first tendency to its involvement in the process. When the patient is fatigued, the tendency to limp becomes more apparent. Gangolphe has recently reexamined his patients and found no traces left of the disturbance. He kept them in bed for a month, with an immobilizing dressing for fifty days, with massage and gradual weight-bearing.

36. **Nephrectomy with Bilateral Renal Tuberculosis.**—Rochet and Thevenot report the ultimate outcome in eleven cases of renal tuberculosis in which one kidney was seriously affected while the other, although tuberculous, was still functioning in a satisfactory manner. The most diseased kidney was removed and six patients survive to date; three in this group are in good health while in three others there are still signs of cystitis for which probably a tuberculous process in the ureter on the side of the operation is responsible. Inoculation of animals with the urine from each kidney before the operation gave positive results, showing that without the nephrectomy the patients would have all been doomed. In two other cases they removed a kidney causing intense pains

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or alarming general symptoms although both kidneys were in advanced tuberculosis. Both patients soon succumbed in a few days to anuria. In another case of this kind with severe advanced bilateral tuberculous renal lesions the right kidney caused the most disturbance and it was punctured three times to evacuate the pus, a glassful escaping each time and the fever going down while the urine cleared up. The general condition during the four years since has been fairly satisfactory, the patient, a man of 38, being up and about and eating with appetite. The results from puncture in this case seem to be much better than those from nephrotomy alone in such conditions, the latter exposing to the danger of a chronic and debilitating fistula.

38. **Roentgen-Ray Treatment of Enlargement of the Thymus.**—Regaud and Crémieu insist that Roentgen-ray exposures of the thymus are the simplest, most harmless and most effectual means of curing disturbances from an abnormally large thymus. From one to five exposures are sufficient for the purpose, they say. This treatment has been applied in eight cases to date, according to their compilation, and the results were very promising, the disturbances subsiding in a few hours or days. They have been conducting extensive experimental research on the action of the rays on the testicles of laboratory animals, dogs and sheep. The action seemed to be identical in all the species studied, and also in the clinical experiences reported, roentgenoscopy showing the reduction of size of the gland under the exposures. Friedlander seems to have been the first to apply the method. It is possible that radium would have a similar effect, and Regaud and Crémieu say that they should not be surprised if this radiotherapy superseded thymectomy entirely except in the most threatening emergencies. In the thirty-nine cases of thymectomy on record fifteen of the children died and in four of these fatal cases the thymectomy had been done on the wrong diagnosis, the real trouble having been bronchial lymphadenitis, the thymus not being responsible for the disturbances.

Presse Médicale, Paris

May 4, XX, No. 37, pp. 393-404

39 Pituitary Extract in Therapeutics. (Applications thérapeutiques de l'action exercée sur les fibres musculaires lisses par le principe actif de l'hypophyse.) B. A. Houssay and M. Ibanez.

40 *Prolapse of the Rectum. C. Lenormant.

40. **Prolapse of the Rectum.**—Lenormant gives the details of eleven cases of rectal prolapse in which he has applied different technics. The sexes were about equally divided and the ages ranged from 19 to 64. He drew up the anus with a wire in a number of cases but his experience with this method was not very favorable as the wire broke into three pieces after a time in one patient; in another case no trace could be found of the wire ring after a few months. On the whole, he says, this wire technic is a good palliative measure but cannot be relied on permanently, except possibly as an adjuvant to fixation of the intestine. He prefers for the latter, fixation to the posterior wall of the abdomen through an elliptical gap cut in the peritoneum.

Semaine Médicale, Paris

May 1, XXXII, No. 18, pp. 205-216

41 *Intramuscular Ether General Anesthesia. (Nouveau procédé d'anesthésie generale: l'étherisation par voie intramusculaire. Descarpentries.

May 8, No. 19, pp. 217-228

42 Mechanism and Features of the Elimination of Chlorids by the Kidneys. (La sécrétion rénale des chlorures.) L. Ambard and A. Weill.

41. See Paris Letter in THE JOURNAL May 25, p. 1612.

Archiv für Gynaekologie, Berlin

XCVI, No. 3, pp. 505-580. Last indexed May 18, p. 1358

43 *Experimental Cancer Induced by Injection of Blastomycetes or Tissue from Human Cancers. (Ueber maligne Tumoren nach Injektion von Reinkulturen von Blastomyceten und über maligne Tumoren bei Tieren nach Implantation menschlichen Carcinoms.) G. Leopold.

44 Epithelium of the Amnion. (Zur Kenntnis der Amnionepithels in normalen und pathologischen Zuständen.) O. H. Forssell.

45 Case of and Literature on Primary Abdominal Pregnancy. (Die primäre Abdominalgravidität.) Richter.

46 Pathology of Tuberculosis of the Ovaries. H. Cohn.

47 Stretching of the Pubic Symphysis. (Untersuchungen über Entstehung und Bedeutung der Spaltbildungen in der Symphyse sowie über physiologische Erweiterungsvorgänge am Becken Schwangerer und Gebärender.) H. Loeschke.

48 *Causes and Treatment of Carcinoma of Female Genitals. A. Theilhaber.

43. **Experimental Cancer.**—This article is the final and complete report on extensive animal experimentation undertaken by Leopold in which he succeeded in inducing malignant growths by injecting pure cultures of blastomycetes in rats or by implanting scraps from human cancers in white rats and rabbits. The report, ready for publication, was found on his desk after his death.

48. **Causal Factors and Treatment of Cancer of Female Genital Organs.**—Theilhaber discusses the reasons for the greater preponderance of cancer of the genital organs in women. Among the factors predisposing to cancer are trauma, scar tissue and defective circulation, and he argues that the very operation removing the cancer leaves cicatricial tissue and impeded circulation which invite the development of a new cancer on the spot, so that a supposed "recurring" cancer is liable to be merely a new cancer invited by the predisposing factors above mentioned. There is usually some preceding cicatrix when cancer develops in the cervix, and fully 20 per cent. of the women with mammary cancer have had mastitis. In 40 per cent. in his own experience in the last two years the malignant disease was traced to trauma. Well developed breasts are peculiarly liable to frequent trauma. Chronic gonorrheal inflammation of large areas in the uterine mucosa and adnexa is another predisposing factor, interfering with the nourishment of the parts, and the latter factor is also evident in the changes of the menopause. All these six factors tend to depress the vitality and metabolism of the cells; the vessels dwindle in size and the vital juices are kept out. From these considerations Theilhaber questions the grounds on which the prevailing system of radical treatment of cancer is based. He thinks it very probable that a large proportion of recurrences after removal of a cancer are due, not to cancer cells left behind, but to development of new cancer in adjacent tissue on account of the conditions there being identical with those that induced the production of the cancer in the first place. He is confident that the body is able to master a few cancer cells left behind from the first operation. In three cases of panhysterectomy for cancer he knowingly left behind some macroscopic cancer nests, and yet the patients have been in good health since for three, five to eight years. He suggests that the extremely "radical" operations are liable to do harm in some cases, and he compares the final outcome of the modern extraradical procedures with those of years ago, especially Karl Braun, 1882, and Byrne, 1889, who used the actual cautery and their results compare favorably with those of the most extensive operations of the present era. He cites Jacobson's recent statement that among the women who had the adjoining lymph-nodes systematically removed only eighteen have escaped recurrence out of 2,765 abdominal operations for uterine cancer in the last ten years. For these and other reasons Theilhaber advocates vaginal panhysterectomy for cancer of the body of the uterus. He intends in future also to make greater use of the actual cautery instead of the knife. The heat from the cautery may have an action on adjacent tissues like that of the Roentgen rays or radium emanation; it may destroy any cancer cells left behind. The actual cautery should at least be used more in palliative operations.

Archiv für klinische Chirurgie, Berlin

XCVIII, No. 1, pp. 1-120. Last indexed June 1, p. 1727

49 *Transplantation of Fat Tissue. (Die Fetttransplantation.) E. Rehn.

50 *Restoration of Continence After Excision of Rectum. (Wiederherstellung der Continenz nach der Excisio recti carcinomatosi.) J. Rotter.

51 Primary Carcinoma of the Appendix. E. Batzdorff.

52 Pathologic Bone Structure. (Pathologische Knochenstruktur.) K. Büdinger.

53 Operations for Hare-Lip and Cleft Palate. (Ueber Uranoplastik.) J. Schoemaker.

54 Fistulas and Cysts in the Neck. (Halsfisteln und Cysten.) R. Wenglowski.

55 Cysts in the Spleen. (Zur Casuistik der Milzcysten.) E. Suchanek.

56 Preperitoneal Position for Loop of Intestine After Operation on It. (Die präperitoneale Lagerung operierter Darmschlingen.) G. Lerda.

57 Advantages of a Vacuum Air Pump as Aid in Operating Room. (Die Verwendung von Saugluft im Operationssaal.) E. Unger and Sturmann.
58 Substitutes for the Trachea. (Ueber Luftröhrenersatz.) E. Schepelmann.
59 Catgut. (Zur Kenntnis des Catguts.) J. Voigt.
60 Roentgen Findings with Fracture of the Ankle and Stretching of Ligaments in the Foot. (Ueber einen Röntgenbefund bei Knöchelbruch und Fussverstauchung.) P. Ewald.

49. **Implants of Fat.**—After discussing the experiences of others in this line, Rehn refers to a case reported by his chief, Lexer, last year in which he restored the normal outline to the face by implanting large pieces of adipose tissue taken from below the breast. The young woman had been frightfully disfigured by a sleighing accident, fracturing one side of her face, with sloughing of the muscles. The implant has retained its shape and consistency, restoring the normal oval and soft outline of the face. Rehn reports much experimental work on the subject and another equally successful clinical case in a young man with traumatic epilepsy. The wound in the skull was reopened and a flap of fat tissue from the patient's upper arm was implanted to cover the defect found in the cortex and dura. The young man has had no return of his attacks to date, six months later. The implanted fat seems to retain its vitality.

50. **Continence After Excision of Rectum.**—Rotter reports his experiences with 103 patients and states that he retained the sphincter in seventy-four cases. Comparing the mortality in this group with those with an artificial anus, in which no attempt was made to retain the sphincter, shows the mortality to be respectively 12.7 and 5 per cent. The attempt to secure continence thus raised the mortality, and this assumption is justified by experiences cited from other clinics.

Beiträge zur klinischen Chirurgie, Tübingen

April, LXXVIII, No. 2, pp. 155-438.

61 *Grafts of Peritoneum from Hernial Sacs. (Ueber freie Transplantation von Peritoneum.) H. Kolaczek.
62 *Primary Mesenteric Tuberculosis. (Klinisches und Pathologisches zu primären Mesterialtuberkulose.) H. Schloessmann.
63 *Diagnosis of Hip-Joint Disease from Displacement of Trochanter. (Hat die Prüfung der Roser-Nélaton'schen Linie diagnostischen Wert?) E. Schwarz.
64 *Carcinoma of the Urachus. E. Schwarz.
65 Rupture of the Biceps Tendon. (Zur Frage der Bicepssehnenruptur.) F. Müller.
66 Deformity from Progressive Ossifying Myositis. O. Jüngling.
67 *Influence of Local Anemia on Action of Toxins and Infectious Processes. (Einfluss lokaler Anämie auf Giftwirkung und infektiöse Prozesse.) R. Bestelmeyer.
68 Drainage of Hepatic Duct. J. Borelius.
69 Ossification of Tuberosity of Tibia in Connection with Certain Disturbances in Children. (Untersuchungen über die Verknöcherung der Tuberositas anterior tibiae mittelst Röntgenstrahlen, in Bezug auf einige Krankheiten der Jugend.) C. Licini.
70 Bilateral Symmetrical Dissecting Osteochondritis. S. Weil.
71 *Myoma in Gastro-Intestinal Tract. (Zur Kasuistik der Myome des Magendarmkanales.) M. Hake.

61. **Peritoneum Grafts.**—Kolaczek devotes eighty-five pages to the description of his animal experimentation and clinical experience with transplanted pieces of hernial sacs to close gaps in the dura, to make an insulating sheath for tendons and nerves, to interpose in ankylosed joints, reenforce suture of a blood-vessel, and to cover or close defects in the peritoneum or other serous membranes. He used both the freshly excised sac and pieces kept alive or "dead" pieces preserved in 90 per cent. alcohol or prepared according to Foramitti's technic.

62. **Primary Mesenteric Tuberculosis.**—In the first case reported by Schloessmann isolated mesenteric tuberculosis developed with the clinical picture of acute ileus, in a boy of 16. In the second case the onset was equally sudden, and acute appendicitis seemed unmistakable. Both patients were apparently cured by prompt excision of the mesenteric lymph-nodes involved. A series of similar cases from the literature are reviewed and the sudden stormy onset emphasized as also the further course as an acute or chronic appendicitis or ileus.

63. **Position of the Trochanter in Hip-Joint Disease.**—Schwarz found that in only seventy out of 500 persons examined was the trochanter exactly on the Roser-Nélaton line, namely, that the spine, trochanter and tubercle, when the thigh is flexed at a right angle to the pelvis, are on a straight line. In all the others the trochanter was much above this line in health and disease.

64. **Cancer of the Urachus.**—Schwarz reports a case which he thinks is the first to be published of a primary carcinoma originating in a normal urachus. The patient was a man of 57 and the growth was successfully removed.

67. **Influence of Action of Local Anemia on Toxins and Infectious Processes.**—Bestelmeyer has been studying conditions when the blood is expelled from the parts—exactly the opposite of Bier's hyperemic treatment. Absorption is naturally reduced, but virulent bacteria do not seem to have their virulence diminished. Infectious processes display a tendency to necrosis rather than to suppuration. He adds that local anemia and Bier's constriction hyperemia have many features in common; the latter is an actual anemia in so far as the arterial blood is concerned.

71. **Myoma in Gastro-Intestinal Tract.**—Hake reports four new cases, bringing to fifty-two the number on record. In ten cases the patients were between 13 and 29, and in twenty-five between 60 and 89, the others lying between. The myomas run a latent course at the cardia but at the pylorus and in the intestine they cause symptoms early. In nine cases the myoma was in the rectum. In two cases there were multiple myomas both in the interior and exterior of the organ. Hemorrhage occurred in fourteen cases; it was the cause of death in eight, and led to a successful emergency operation in the others. Operative treatment was applied in twenty-one of the forty-three cases of which the details are tabulated. The operation was done for hemorrhage or on suspicion of cancer, mostly in the bowel cases. The myoma was in the appendix in one man of 56. The sexes were about equally involved in the total material.

Correspondenz-Blatt für Schweizer Aerzte, Basel

April 10, XLII, No. 11, pp. 401-440

72 *Endocarditis not Entailing Valvular Defect. (Zur Frage der ohne Funktionsstörung im Sinne eines Herzfehlers verlaufenden chronischen und recidivierenden Endocarditis der Mitralis und der Aortenklappen.) C. Amsler.

April 20, No. 12, pp. 441-472

73 Diagnosis and Treatment of Motor Insufficiency of the Stomach. (Mageninhaltsstauung.) E. Fricker.
74 Pituitary Extract as Oxytocic. (Hypophysenextrakt, das Pituitrin resp. Pituglandol, als Wehenmittel.) E. Anderes.
75 Postoperative Paralysis. (Eine ursächlich unklare postoperative Plexuslähmung.) F. Paravicini.

May 1, No. 13, pp. 473-520

76 Electric Treatment of Arteriosclerosis. (Behandlung der Arteriosklerose mit hochfrequentem Strom.) A. Buhler.
77 Scleroma of Upper Air Passages. (Ueber das Sklerom der oberen Luftwege.) F. R. Nager.

72. **Verrucous Endocarditis Healing Without Functional Disturbance.**—Amsler states that of the seventy-six patients with chronic and recurring verrucous endocarditis at the Basel university medical clinic during the last four years, sixteen, that is, 21 per cent., recovered without any consecutive clinical functional disturbances. Even in cases in which a serious valvular defect was known to exist, yet the functional outcome was remarkably favorable. The verrucous affection involved the mitral or aortic valves, and in some cases not even at necropsy were evidences found of a cardiac defect, the lesions having healed smoothly. The cases were all of bacterial or bacterial-toxic origin. In some of the cases the heart cavities were somewhat enlarged and the heart a little heavier than normal, but these changes could be referred to factors outside the heart, contracted kidney, etc. He gives the necropsy findings in detail in the sixteen cases. The patients were 15, 17, 20 and up to 79 years old.

Deutsche medizinische Wochenschrift, Berlin

May 2, XXXVIII, No. 18, pp. 833-880

78 *Chorea. (Behandlung der Chorea minor.) J. Grober.
79 Duodenal Ulcer. (Ueber das Ulcus duodeni.) A. Bier. Commenced in No. 17.
80 *Pernicious Anemia. (Wesen der essentiellen perniziösen Anämie.) V. Ellermann.
81 Roentgenoscopy of Gastro-Intestinal Tract. (Zur Diagnostik von Magendarmkrankheiten mittels des alten Röntgen-Zeitinstrumentariums.) E. Zabel.
82 Movable Cecum. (Zur Lehre vom Coecum mobile.) W. Merkens.
83 Importance of Vaccine Therapy in Urology. H. Reiter.
84 Occupational Nail Disease in Candymakers. (Die Nägelentzündung der Konditoren—eine Berufskrankheit.) M. Strauss.

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78. Chorea.—Grober remarks in the course of this general lecture on chorea that it is advisable for persons in contact with one who has acute chorea minor to rinse out the mouth and throat frequently and gargle with antiseptic fluids. He adds that this is advisable also for those in contact with any acute infectious disease, especially for the doctor and the attendants. The connection between chorea and articular rheumatism suggests the possible efficacy of the salicylates but he has never witnessed the slightest benefit from their use while the patients' repugnance to the salicylate seemed to aggravate the nervous tendency. He gives a drastic purge the first thing, as withdrawal of fluids from the body seemed to benefit both the local and general disturbance. He has frequently witnessed a pronounced mitigation of the choreic symptoms afterward, even when the purge had not been given until several days after the chorea was installed. The disease seemed to have been aborted, but there is of course a possibility of a casual coincidence. He says that the greater his experience with chorea the less dependence he places on drugs alone. The main factor in treatment is a tranquilizing environment, with care for nourishment and sleep, with nothing read or told the patient to excite him. Prolonged warm baths are often of decided benefit, keeping the water constantly at 34 to 37 C. (93.2 to 98.6 F.). Three such baths can be given during the day; the appetite and need for sleep are much promoted thereby, but anything in the way of a pack irritates and frightens a child with chorea. In his experience, one in three of the patients showed signs of endocarditis; rest is particularly important in these cases. He says that moist heat has given better service in local applications to the heart in these cases than ice, which he regards as dangerous here. He adds that in many cases neurasthenia and other nervous affections in children can be traced to a lack of care over the child during the period of convalescence from chorea.

80. Probable Parasitic Origin for Pernicious Anemia.—Ellermann thinks that there are numerous reasons for assuming that myeloid leukemia, lymphatic leukemia and essential pernicious anemia are all allied affections, just as the three forms of malaria, tertian, quartan, etc., are allied. As the infectious nature of leukemia has been demonstrated by animal experimentation, it seems plausible to assume the same origin for pernicious anemia with its three groups of anatomic changes, the gastritis, the production of marrow tissue in the long bones and the myeloid transformation of the spleen and liver and the secondary anemic changes, fatty degeneration and siderosis. If pernicious anemia is of infectious origin, this would explain the benefit from arsenic. An invisible virus has been discovered as responsible for fowl leukemia and a filterable virus for epidemic anemia in horses and in a similar disease in dogs, not to mention kala-azar in man, the parasites for which are well known.

Deutsche Zeitschrift für Chirurgie, Leipsic

April, CXIV, Nos. 5-6, pp. 417-608

85 *Cysts in Bones. (Isoliert autretende cystische und cystisch-fibröse Umwandlung einzelner Knochenabschnitte.) R. Stumpf.
86 Experimental Research on Prophylaxis of Postoperative Peritonitis. (Thierversuche zur Frage der Prophylaxe postoperativer Bauchfellentzündungen.) E. Schepelmann.
87 Duodenal-Jejunal Hernia. (2 Fälle von Treitzschen Hernie.) Maschke. (Ein treitzscher Hernie mit doppelter Incarceration.) H. Prichatsch.
88 Rare Fractures and Dislocations of the Upper Arm. (Einige seltene Frakturen und Luxationen des Oberarmkopfes.) H. Luxembourg.
89 Congenital Absence of the Femur. (Ueber angeborenen Femurdefekt.) O. Crelte.
90 *Anastomosis for Arteriovenous Gangrene of the Leg. H. Luxembourg.
91 Preliminary Sedatives with Local Anesthesia for Laparotomies. (Ueber Pantopon-Scopolamin-Lokalanästhesie bei Bauchoperationen, insbes. bei der Appendektomie.) M. Stenglein.
92 Incarcerated Hernia of the Bladder. (Fall einer eingeklemmten paraperitonealen Blasenhernie.) L. Sussenguth.
93 Treatment of Leg Ulcers. (Zur Behandlung der Unterschenkelgeschwüre.) A. Lindemann.
94 Bone Plastic Operations to Close Defects in the Skull. (Knochenplastik bei Substanzverlusten des Schädeldaches.) S. Solieri.

85. Cysts in the Bones.—Stumpf's long article is accompanied by colored plates and eighteen illustrations in the text of the findings in three cases, which he compares with those on record. Rachitis was evidently a factor in one case but chronic irritation or trauma was a probable factor in the others. Cystic fibrous metaplasia or fibrous ostitis is generally responsible for the lesions, but he does not think there is any sharp dividing line between them and the solitary cysts in the bones in whose wall only a little fibrous tissue is found, remarkably free from giant cells. In some cases on record both types were encountered.

90. Arteriovenous Anastomosis.—Luxembourg's patient was a man of 55 with chronic osteoarthritis of one shoulder and incipient angiosclerotic gangrene of the left foot. The femoral artery and vein were united and the result was good at first, but symptoms of sepsis developed two weeks later, which proved fatal four weeks after the operation. Thrombi found at necropsy teach that the vein should be ligated as far from the point of the anastomosis as possible. Even at the best the outcome of this operation is extremely uncertain; various complications may develop to annul the possible benefit from it.

Jahrbuch für Kinderheilkunde, Berlin

May, LXXV, No. 5, pp. 533-662

95 *Lime Balance of Bottle-Fed Infant. (Kalkbilanz eines künstlich genährten Säuglings.) A. Niemann.
96 *Congenital Acromegaly. (Fall von angeborener abnormer Grösse der Extremitäten mit einem an Akromegalie erinnernden Symptomenkomplex.) V. Salle.
97 *Portable Incubator. (Tragbare Couveuse zum Transport von Frühgeborenen.) E. Welde.
98 *Tuberculin Treatment of Tuberculosis in Children. (Erfahrungen über die Behandlung der Kindertuberkulose mit dem Kochschen Alttuberkulin.) J. Cronquist.
99 Rachitic Osteochondritis. M. Kassowitz. Commenced in No. 4.
100 Technic for Breast Milk Feeding During First Month. (Zur Technik der Ernahrung der Brustkinder in den ersten Lebenswochen.) H. Rietschel. Commenced in No. 4.

95. Lime Metabolism in Bottle-Fed Infant.—This study of the lime balance supplements Niemann's research on the total metabolism in an artificially fed infant of which he published his conclusions in the preceding volume of the *Jahrbuch*.

96. Acromegaly in New-Born Infant.—Salle reports the clinical history and necropsy findings of a child that measured 58 cm. at birth and weighed 3,125 gm. but its hands were 7.5 cm. and its feet 10.6 cm. long, the middle finger 4.5 cm. and the big toe 3.4. The nose, chin and tongue were also abnormally large; the hypophysis was deformed from the pressure of a bulging portion in the base of the skull. The irritation from this had probably induced hyperfunctioning of the hypophysis.

97. Portable Incubator.—Welde's small incubator is kept warm on the principle of vacuum bottles. It is designed to send to the home on demand to bring the prematurely born infant safely to the clinic.

98. Tuberculin Treatment of Tuberculosis in Children.—Cronquist has given courses of "old" tuberculin to 102 tuberculous children since 1907, and here reviews his experience. Forty-eight of the children who are clinically cured of their tuberculosis have been reexamined twice or four times a year since with the local tuberculin tests, and twenty-three give a constantly negative response. His principle in treatment is to progress without inducing a reaction of any kind to the optimal, possibly quite large, doses and keep up these optimal doses only until the tuberculous process has quite healed. At any sign of a reaction he reduces the dose to a tenth of what it had been, and increases still more cautiously. He also makes a point of examining the urine every day for albumin during the entire tuberculin course, as he regards the slightest sign of irritation of the kidneys as a formal contra-indication for the tuberculin.

Medizinische Klinik, Berlin

May 5, VIII, No. 18, pp. 723-766

101 Importance of Diet in Treatment of Cardiovascular Disease. (Die Diätbehandlung bei Herz- und Gefässkrankheiten.) H. Strauss.
102 Conservative Operative Treatment of Chronic Otitis Media. (Meine Methode der konservativen Radikaloperation bei chronischer Mittelohreiterung.) R. Barany.
103 Roentgenoscopy of the Stomach. (Radiologische und klinische Beobachtungen zur Mechanik des Magens.) K. Sick. Commenced in No. 17.
104 Depilatory Measures. (Haarentfernungsmittel.) E. Saalfeld.
105 Salvarsan in Syphilis. (Bericht über 216 intramuskuläre Salvarsaninjektionen.) B. Fuchs.
106 Mimicry in Animals and Plants. (Ueber Mimicry im Tier- und Pflanzenreich.) W. Wangerin.
107 Psoriasis. F. Pinkus.

Münchener medizinische Wochenschrift

April 23, LIX, No. 17, pp. 905-969

108 Neo-salvarsan. E. Schreiber.
109 Serotherapy of Typhoid. (Die Serumtherapie des Abdominaltyphus.) H. Lüdke.
110 Mental Factor in Mountain Sickness and Fatigue. (Die Rolle der Psyche bei der Bergkrankheit und der psychische Faktor bei Steigermüdungen.) C. Widmer.
111 Straight and Crooked Legs. (Das Gesetz von der Umformung der Beine und die X-Beine unserer Frauen.) K. Francke.
112 Technic for Ether Anesthesia. (Die "Gaze-Aether-Methode," das einfachste Verfahren der Aethernarkose.) M. v. Brunn.
113 *Ethyl-Chlorid General Anesthesia. (Ueber Chloräthylrausch und -Narkose.) G. E. Baumann.
114 Salvarsan in Yaws. (Ueber Salvarsan bei Framboesia.) G. Rost.
115 Fistula in the Chin. (Zur Diagnose und Therapie der Kinnfistel.) G. Hesse.
116 *Hands After Loss of Three Fingers. (Ueber Zangenhände.) W. Steimann.
117 Children with a Tail. (Zur Kenntnis des geschwanzten Menschen.) G. Schwarz.
118 Raskin's Technic for Staining Diphtheria Bacilli. (Zur Diphtheriebacillenfärbung Raskin.) O. Goetze.
119 *By-Effects of Hormonal. (Hormonalnebenwirkungen.) E. Rosenkranz.

April 30, No. 18, pp. 961-1024

120 *Importance of Physical Measures in Treatment of Intermittent Limping. (Ueber intermittierendes Hinken.) W. Winternitz.
121 Anatomic Findings After Experimental Methyl-Alcohol Poisoning. (Tierexperimenteller Befund im Zentralnervensystem nach Methylalkoholvergiftung.) A. Rühle.
122 Retrogression of Syphilids Under Salvarsan. (Die histologische Rückbildung der Hautsyphilide unter Salvarsan.) Rohrbach.
123 *Acute and Chronic Septic Endocarditis. (Ueber Endocarditis lenta und die akute, durch den Strept. viridans hervorgerufene Endokarditis.) A. Lorey.
124 Staphylococcus Septicemia. (Zur Kenntnis der Staphylokokkensepsis im Anschluss an kleine Eiterungen der Körperoberfläche.) L. Nürnberger.
125 Importance of Shoulder for Deformities of Spine. (Bedeutung des Schultergürtels für die Haltungsanomalien und Rückgratsverkrümmungen.) K. Hasebrock.
126 *Total Dislocation of Cervical Vertebræ. (Die totalen Wirbelverschiebungen im Bereich der unteren Halswirbelsäule, ihre Prognosis and Beurteilung.) F. O. Quetsch.
127 Pigmentation of Skin After Salvarsan. (Melanodermie nach Salvarsanspätdermatitis.) K. Grön.
128 Pyramidon in Typhoid. (Zur Pyramidonbehandlung des Typhus.) M. John.
129 Agar as Vehicle for Local Medication in Gonorrhea. (Behandlung der Gonorrhoe, insbes. mit einer wasserhaltigen Gleitmasse als Vehikel für Antigonorrhoica.) C. Schindler.
130 Cremaster Reflex in Undescended Testicle. (Zur Diagnose des ektopischen Hodens.) H. Wachtel.
131 Improved Technic for Operative Treatment of Prolapse of Uterus. (Eine Variation der üblichen operativen Behandlung der weiblichen Prolapse.) Spoerl.
132 *By-Effects of Hormonal. (Ueber die Nebenerscheinungen bei Hormonalanwendung.) D. Frischberg.

113. Ethyl-Chlorid General Anesthesia.—Baumann describes the technic followed at the marine hospital at Kiel during the past year. No respiratory disturbances or tendency to suffocation were observed in any instance. A period of agitation was encountered only in the rarest cases and then it was very brief, and no tendency to vomiting or other disagreeable by-effect was noted.

116. Industrial Accidents to the Hands.—Steimann declares that surgeons are too apt to treat industrial accidents of the fingers with undue conservatism. He thinks that instead of retaining useless and disturbing middle fingers, it is much better to excise them and leave the hand with a clear space between the thumb and little finger. With the "hook hand" left in this way, the patient has a firm grip of whatever he takes hold of, and Steimann's recent reexamination in three typical cases has demonstrated that the hand renders good service in rough work and even in sewing and knitting, as he shows in fifteen illustrations.

119. By-Effects of Hormonal.—Rosenkranz reports symptoms resembling those of air embolism coming on during the injection of 10 c.c. of hormonal. After gasping for breath for a time the patient screamed that his head was bursting, his face was drawn and eyes fixed, the pulse accelerated. The dyspnea soon subsided after the headache developed, and the latter gradually declined in the course of several hours. The intravenous injection of the hormonal was given two days after a second laparotomy to release adhesions which had formed nineteen days after an appendicectomy. The patient was a young merchant; seven hours after the injection an enema succeeded in bringing a stool. A transient increase in peristalsis followed half an hour after the injection, as also in another case with complete paralysis of the intestine in which flatus passed a short time after the hormonal had been injected. This patient succumbed later to fulminating peritonitis. See abstract 132 below.

120. Intermittent Limping.—Winternitz makes the usual protest against the name of this affection, and then reports a case which throws light on the treatment from a new standpoint. His patient was an elderly man with general arteriosclerosis and a somewhat weakened heart, but vigorous. After walking for a time he would suddenly find it impossible to take a step, this attack of intermittent limping coming on five or six times in the course of a walk, the face and ears becoming pale, the lips cyanotic, with a disagreeable sensation in the chest, jaws and temples. After a pause of a minute or two, the pseudo-angina pectoris subsided and he proceeded on his walk. After five or six of these attacks he could go for an hour without further disturbance. The case teaches, Winternitz thinks, that the aim in treatment should be exercise, not rest, for the circulatory system. In this case the patient was not deterred from continuing his exercise by these annoying attacks of "intermittent claudication of the heart" as the trouble might be called. By continued exercise he overcame the tendency to the disturbance for the time being, and by systematically continued exercise afterward he has finally succeeded in overcoming the tendency permanently to date. Winternitz found that exercising on level ground did not have by any means so good an effect as climbing hills. When the patient's walk took him among the hills he conquered the tendency to intermittent limping much quicker than on level ground. Winternitz emphasizes anew the importance of keeping the vessels elastic, functionally capable and contractile by supplying them with normal blood and having the walls of the vessels well supplied with blood—this factor in the treatment of intermittent limping has been too much neglected hitherto, he thinks, especially physical and dietetic measures.

123. Septic Endocarditis.—Lorey reports two cases of septic endocarditis the work of the *Streptococcus viridans*, similar to the cases of septic endocarditis described by Schottmüller (summarized in THE JOURNAL, May 14, 1910, p. 1658), only that in Lorey's cases the affection was acute, and fatal in one case; the course was so insidious and chronic in all of Schottmüller's cases that he called the disease endocarditis lenta. Lorey's first patient was a woman of 26, previously robust, who suddenly developed high remittent fever with pains in some joints and daily chills; the genital organs were normal. The above streptococcus was cultivated from the blood and fatal embolism developed by the end of the month. The second patient was a young man and the onset was even more stormy, the discovery of the streptococcus in the blood explaining the signs of severe endocarditis observed; infarcts developed in the lungs, and the young man was left with mitral insufficiency as the affection subsided with a crisis about the seventh week. At present, seven months later, he seems quite restored except for his well compensated mitral insufficiency and a tendency to occasional palpitations after the day's work. Lorey calls attention to the fact that in this case he made an intravenous injection of 0.6 c.c. salvarsan the sixteenth day of the disease, when conditions seemed very threatening, and at once there was a marked change for the better. It lasted for a week when an infarct in the lung sent the temperature up again, but after this recovery proceeded. Lorey does not venture to say that the salvarsan was responsible for the favorable outcome, but remarks that only two other cases of recovery are on record (Lenhartz and Joachmann), and that none of the other measures applied seemed to afford the slightest relief.

126. Dislocation of the Cervical Vertebræ.—Quetsch reports five cases of total forward displacement of the lower cervical vertebræ in which there were little or no resulting disturbances as the patients adapted themselves to the new conditions and the partial paralysis in three of the cases subsided. Attempts at reduction are advisable, he says, only in the most recent cases. When attempted, it should be by cautious extension in an extension frame, and this should be done in all cases in which the spinal cord is suffering to a threatening extent. Improvement follows when the pressure of the bone on the spinal cord is relieved and better conditions for the local circulation are restored.

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132. **By-Effects of Hormonal.**—Frischberg states that the hormonal answered the desired purpose in the case reported, but only after a threatening collapse. Before the injection was concluded, the patient, a man of 36, complained of intense headache, the pulse grew weak so that camphor had to be injected, the face was slightly cyanotic, and a very severe chill, lasting thirty minutes, followed. At its close the body temperature was 41 C. (105.8 F.), and then came profuse perspiration. During all this period the patient was confused and delirious, tossing in bed and having to be held to prevent his getting up. The injection had been made the fourth day after an operation for chronic appendicitis under chloroform, and 20 c.c. of hormonal had been injected, as the abdomen was enormously distended and the bowels had not moved. The action of the hormonal became evident even during the chill; flatus passed and the abdomen subsided to its normal size, with stool during the night. See abstract 119.

Wiener klinische Wochenschrift, Vienna

May 2, XXV, No. 18, pp. 651-690

133 Experimental Research on Arthritic Atrophy of Muscles. A. Schiff and E. Zak.
134 Physiologic Chemistry of the Skin. (Chemie der Haut.) F. Laitbleu.
135 Advantages of Physical Examination of Patient in Ventral Decubitus. (Zur physikalischen Untersuchung der Kranken bei Lagerung auf dem Bauche.) W. Jaworski.
136 *Treatment of Cholelithiasis. L. v. Aldor.
137 Percussion Test of Sensibility of the Abdominal Organs. (Prüfung der Schmerzempfindung der Abdominalorgane mittels Perkussion.) S. Zavadier.
138 Influence on Adrenals of Roentgen-Ray Exposures. (Einfluss der Bestrahlung der Nebennieren in physiologischer und therapeutischer Hinsicht.) A. Zimmern and P. Cottenot.

136. **Treatment of Cholelithiasis.**—Aldor practices at Carlsbad and in treatment of gall-stones he lays great stress on rectal infusion of two liters of Carlsbad water at a temperature of 45 or 55 C. (113.0 or 131 F.), preceded by an evacuating enema. The patient reclines afterward, with heat applied to the abdomen, and he can thus retain the hot water for an hour and a half or two hours. The copious diuresis that follows testifies to the large amount of the fluid absorbed, sparing the stomach the necessity for much drinking. The intestine tolerates greater heat than can be applied in the stomach. The hot enema has further a curative action on catarrhal bowel trouble, which almost invariably accompanies severe cholelithiasis. He reiterates that the aim in treatment of gall-stones is not to expel the stones; internal measures directed to this end are irrational and unconditionally harmful. Not the removal of the stones, but the cure of the inflammatory process which they have set up is the end to be sought. When the stones are at rest and the inflammation healed, the period of latency which ensues is equivalent to a complete cure. He urges to give morphin freely; his rule is 0.02 or 0.03 gm. in the acute attacks, always accompanied by 0.001 gm. atropin. He thinks there is no danger of drug addiction, for as soon as the gall-stone pains are past there is no longer any incitement to take morphin. In fifteen years of practice he has seen only one or two examples of gall-stone morphin addiction. The subsidence of the colic in the acute attack merely indicates the end of the condition of irritation of the sensory nerves, mostly in the cystic duct. The inflammatory process responsible for their irritation still persists, and the disregard of this fact is the chief cause for the acute inflammation's becoming a chronic affection. This explains further the illogical basis and harmful results of the remedies advertised to cure cholelithiasis—they are all more or less drastic purgatives or cholagogues. The immediate effect is a briefly transient relief, as after a drastic purgative with any catarrhal bowel trouble, but the catarrhal tendency is seriously aggravated by them. Increased secretion of bile only adds to the amount stagnating in the gall-bladder, so that cholagogues are directly contra-indicated. One of the benefits from the Carlsbad waters is that they reduce the secretion of bile while diluting that on hand. The chief aim of treatment in cholelithiasis, therefore, is to rest the parts and dilute the bile. Carlsbad householders have rearranged their gardens to facilitate the rest cures now deemed such an important factor in treatment of gall-stones, and "colics" are becoming very rare. The diet should be adapted to spare the stomach, intestines and liver as much work as possible, reducing the total albumin and avoiding alcohol and extractives. Blunders in differentiation are common everywhere. In one case a man of 40 had supposed chronic recurring cholecystitis. After years of treatment a surgeon found adhesions between the duodenum and the gall-bladder and removed the latter which proved to be normal. Two weeks later all the old symptoms reappeared and a second laparotomy revealed the true source of all the trouble in a duodenal ulcer. In another case a woman of 30 had attacks stimulating gall-stone colic, but von Aldor ascribed them to spasm of the colon alone. He was unable to dissuade the patient against an operation, and cholecystotomy was done and the gall-bladder found normal in every respect, but after the operation an infectious process developed in it and chronic cholecystitis has persisted ever since, with varying intensity. A severe empyema was a necropsy surprise in another case in which there had never been any symptoms to attract attention to the biliary apparatus. There is no conclusive evidence to date that gall-stones favor the development of cancer of the gall-bladder; statistics seem to indicate that the cancer is the primary lesion.

Zentralblatt für Chirurgie, Leipsic

May 4, XXXIX, No. 18, pp. 601-640

139 *Paravertebral Nerve Blocking Anesthesia. (Zur Technik der paravertebralen Leitungsanästhesie.) H. Finsterer.

139. **Paravertebral Blocking of Nerves for Local Anesthesia.**—Finsterer is convinced that a ramus communicans from the ganglion or spinal nerve, connecting it with the splanchnic nerve, contains the sensory nerve fibers for the root of the mesentery. If they are blocked here, then the entire abdominal viscera will be anesthetized. He introduces the needle about 3 cm. from the median line, close to the spinous process of the first lumbar vertebra, until the needle at a depth of 4 or 5 cm. strikes the transverse process of the first lumbar vertebra. The tip of the needle is worked along its upper margin and then pushed in ½ or 1 cm. farther, pointing the tip toward the median line and a little upward. He then injects, fan-wise, 5 c.c. of a 1 per cent. solution of novocain. He has applied this technic in six cases and in four the anesthesia was perfect. The second and third lumbar nerves are treated in the same way, guided by the transverse process. The skin has to be anesthetized separately for the incision. Fifteen minutes must be allowed for the anesthetic to act, but its influence lasts unmodified up to two hours. The technic is harmless in comparison to spinal anesthesia but it requires some skill to reach the proper point. He adds that the method is not adapted for routine use but promises well for appendicitis and other operations on the large intestine when the general condition contra-indicates ether and chloroform.

Zentralblatt für Gynäkologie, Leipsic

May 4, XXXVI, No. 18, pp. 561-592

140 *Local Anesthesia in Gynecology. (Vaginale Totalexstirpation des Uterus in Leitungsanästhesie.) E. Ruge.
141 *Artery Press for Instrumental Compression of Abdominal Aorta. (Eine ungefährliche und sichere Methode geburtshilflicher Blutstillung.) C. J. Gauss.
142 Pelvis Deformed from Defective Development of the Sacrum. (Das angeblich "dyspygische" Becken von Prof. Solowij.) W. Bylicki.

140. **Nerve-Blocking Anesthesia for Vaginal Hysterectomy.**—Ruge says that the public now clamor for local anesthesia, and that few fields are so promising for it as vaginal operations. Wernitz has reported 300 cases of curetting after abortion done under local anesthesia induced by injecting small amounts of a 1 or 2 per cent. solution of cocain into the cellular tissue of the vagina close to the uterus. Ruge uses a 1 per cent. solution of novocain with a little epinephrin and injects it through the roof of the vagina, 4 or 5 cm. deep, into the tissue surrounding the uterus, repeating the injection farther forward and back, at a depth of 2 or 3 cm. in front and less than this at the back, injecting from 3 to 5 c.c. at each of the symmetrical points—a total of about 40 c.c. of the anesthetic fluid. The main difference between this and Wernitz' technic is that the entire field of the vaginal operation is anesthetized. He has done a vaginal total hysterectomy

with this technic in two cases and neither of the women had any pain during the operation and kept assuring the surgeon that they did not feel anything of what was going on. Ruge adds that skilful local anesthesia does away with the necessity for preliminary sedatives, scopolamin, "twilight sleep," etc., which he always refrains from when possible.

141. **Artery Press to Arrest Post-Partum Hemorrhage.**—Gauss' instrument is something like a copying letter-press in a business office. A broad sheet of metal is passed under the patient's back; it curves up a trifle in the center and forms a solid background. The patient lies on this and pressure is applied from above by an elastic pad screwed down to compress the abdominal aorta. The patient is held immovable by small plates screwed inward against her side both right and left. He gives an illustrated description of the abdominal aorta press which answers the same purpose as Momburg's belt constriction only it applies the compression exclusively at the point where it is needed, and nowhere else. He has applied the *Aderpresse* to date in 100 cases of hemorrhage from atony or laceration of the uterus, and also in two cases of cesarean section. In the latter cases the hemostatic action of the press could be instructively studied. It failed completely in only one case and only one patient complained of unbearable pain. Another asked why her "Sunday bodice" was being put on her, the pressure of the pad recalling the tightly laced bodice of her old mountain home. No injury of the viscera or heart action was discovered in any instance from the use of the "iron maiden" as the press has been nicknamed.

Gazzetta degli Ospedali e delle Cliniche, Milan

April 28, XXXIII, No. 51, pp. 529-544

143 Resistance of Tubercle Bacilli and Their Products to Action of Radium. (Sulla resistenza del virus tubercolare e dei suoi prodotti all'azione del radio.) V. Puntoni.

144 Cholera Before It Was Eradicated in Tripoli. (Su alcuni casi di colera osservati a Tripoli.) L. Dozzi.

Policlinico, Rome

April 28, XIX, No. 18, pp. 629-664

145 *Cystitis in Children. (Febbre intermittente da cistite nell'infanzia.) R. Petrucci.

145. **Febrile Cystitis in Children.**—Petrucci reports two cases of mysterious intermittent fever in children of 4 and 5. On inquiry it was ascertained that the children had complained of pain at micturition, and this gave the clue for discovery of the cystitis by microscopic examination of the urine. Petrucci warns that the urine should be examined as a routine measure in all cases of intermittent fever and chills of unknown origin, especially those which suggest intestinal or malarial affections.

Riforma Medica, Naples

April 27, XXVIII, No. 17, pp. 449-476

146 *Syphilis of the Brain. (Sifilide cerebrale.) G. B. Queirolo.

147 *Pure Mitral Stenosis. (La stenosi mitralica pura. Ispezione e palpazione del cuore. Algie spontanee e provocate con la pressione.) M. Landolfi.

146. **Cerebral Syphilis.**—Queirolo reports two cases. In the first there was a tendency to paralysis of the face and arms with mental confusion, loss of memory, etc. No symptomatic measures had given any relief, the condition having grown gradually worse. There was nothing to suggest that the disturbances were due to arteriosclerosis of the cerebral vessels, and a tentative course of mercury and iodid gave surprising results; improvement was evident in a week or so and by the end of a month the cure was apparently complete and the patient resumed his official duties as a judge on the bench. The second patient was a woman of 62 without suspicion of syphilis in the family; she suddenly developed paresthesia and derangement of coordination in the limbs, progressing to total paralysis of the right leg and arm. The age of the patient and the slow, progressive course of the disturbances suggested a possible syphilitic origin, notwithstanding the negative history, and the diagnosis was confirmed by the improvement after three days of mercurial and iodid treatment and the cure was complete in a month. The lesions in these cases were of such comparatively recent date that complete restitution proved possible.

147. **Pure Mitral Stenosis.**—Landolfi has been making a special study of pure mitral stenosis and here reports his conclusions based on 200 cases. He reviews the routine examination and interpretation of the findings, saying that incipient, rudimentary mitral stenosis escapes detection by ordinary inspection and palpation but that it is possible to differentiate it even in its earliest stages by various signs and symptoms including the displacement of the wave of the apex beat to the left (which he found in 91 per cent.) or to the left and upward (5 per cent.); slight reduction in the passive mobility of the heart (55 per cent.); displacement upward of the apex when the patient changes from the reclining to the seated position (73 per cent.); the beat more extensive in the transverse sense (88 per cent.); the beat a little more pronounced than normal (7 per cent.); the beat arhythmical (51 per cent.) or a double impulse at the apex (5 per cent.); absence of the physiologic negative pulsation (25 per cent.); diffuse shock in the lower half of the sternum; well marked pulsation at the left and right margins of the sternum; cardiac impulse in the epigastrium (97 per cent.); in the lung region (33 per cent.); the auricular cardiac impulse of Grocco (15 per cent.); diastolic valvular shock over the pulmonary; presystolic or diastolic-presystolic thrill at the apex; Brun's dull pain at a point in the epigastrium, below and to the left of the xiphoid appendix, the continuous vague pain here being exaggerated by pressure and sometimes becoming sharp and radiating to the region around the umbilicus or the entire abdomen or in a girdle radiating to the lower part of the back; Vaquez' auricular tender point is the result of enlargement of the auricle. The pain here develops spontaneously at different points or can be elicited by pressure. The patient complains of vague discomfort in the back but locates the seat of the pain on demand in the region between the spine and the spinal margin of the left scapula. In conclusion Landolfi expatiates on the great diagnostic importance of the zones of Head in differentiation of pure mitral stenosis, and gives the details of five cases in which these zones were particularly in evidence.

Revista de Medicina y Cirugia, Havana

May 10, XVII, No. 9, pp. 243-274

148 Severe Colitis Treated with Appendicostomy; Three Cases. R. Stincer.

149 Preventable Noise in Cities. (Ruidos y gritos en las ciudades.) L. M. Cowley.

Semana Medica, Buenos Aires

April 4, XIX, No. 14, pp. 649-692

150 *Parinaud's Conjunctivitis. (Estudio clinico, bacteriologico e histo-patologico de la conjunctivitis infecciosa de Parinaud.) R. Argañaraz.

151 Reflex Muscular Contraction Sign of Typhoid Fever. (Signo de Alvarado-Burke diagnostico de la fiebre tifoidea.) P. A. Saffores.

150. **Parinaud's Conjunctivitis.**—Argañaraz expatiates on the necessity for differentiating the conjunctivitis described by Parinaud from other forms of conjunctivitis, stating that it is not contagious and that it is impossible to reproduce the affection in animals. In man it runs a relatively mild course, healing in from seven to ten months without leaving any trace. The cornea and the lacrimal passages persist intact throughout its entire course. The assumption of an animal origin is problematic, he continues, and the affection is not tuberculous. The chief characteristics are the inflammation and granulations, the swelling of the lids, the infarct in the lymph-nodes and the fever and anorexia—no other form of conjunctivitis combines these four groups of symptoms. Diphtheria antitoxin injections seem to modify favorably the primary stage of the disease, but he warns expressly against cauterization of the granulations as this is liable to leave complications in the cornea while, left alone, the lesions subside in time completely. The *Bacillus xerosis* seems to have something to do with the affection. He reports in detail three cases in children and one in a brother physician.

JOURNAL Announcements, Knocks and Boosts, Books Received and changes in the Public Service will be found in the advertising section, commencing on the second page following reading matter.

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